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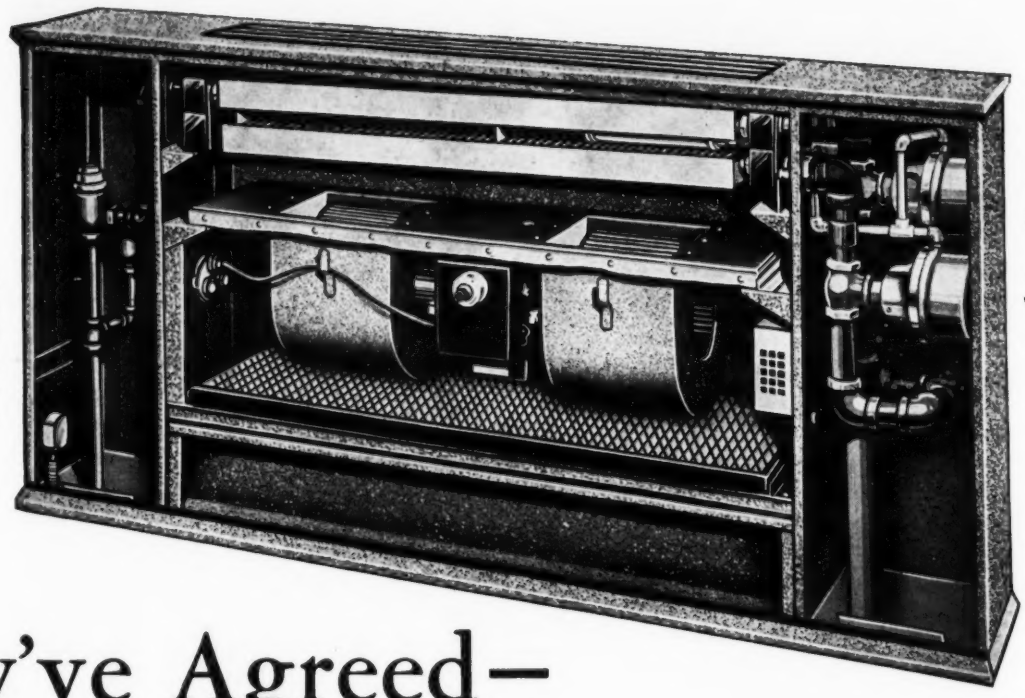
THE AMERICAN
School Board Journal

A Periodical of School Administration

NOV 2 - 1932

NOVEMBER
1932



Interior of the UNIVERSAL DUO-LUXE *Heating and Ventilating Unit with Pneumatic Controls*

How to Have Syncretized Air in Your Classrooms

They've Agreed—

to end cold drafts and overheating!

SCHOOLROOM heating and ventilating was less than perfect before the development of Universal DUO-LUXE Units, because the Air-stream (from-the-unit) Temperature and the Room Temperature often disagreed.

The thermostat over on the wall would call for *more* or *less* heat. The unit would respond, but because of the time required for the air to circulate across the room and affect the thermostat, an Air-stream first too hot and then too cold would be discharged into the room.

The occupants felt alternate sensations of overheating and cold draft. Room temperature, although fairly constant at the thermostat, varied at different points in the room (see Chart 1).

So, the makers of Universal Units designed the double-radiator DUO-LUXE, with controls of both Air-stream and Room Temperatures right within the unit. The lower radiator heats the Air-stream to 60 degrees *before permitting it to enter the room;* the upper radiator heats the Air-stream *just enough* to maintain the desired Room Temperature of 70 degrees *throughout the occupied area.*

Now the Air-stream and Room Temperatures get along marvelously (see Chart 2). They've been brought together, reconciled, so as to produce what we call Syncretized Air, a sort of perpetual June in the classroom. The complete story of this greatest improvement in the unit system of heating and ventilating is told in Publication 217, which may be had by merely sending us a postcard request.

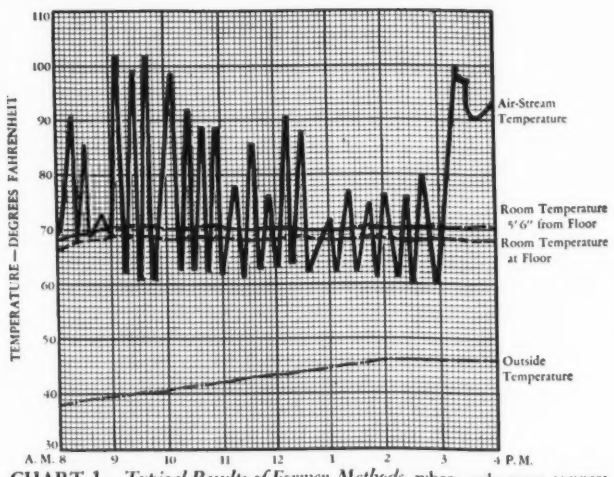


CHART 1—*Typical Results of Former Methods,* where only room temperature is controlled. Note the unruly air-stream temperature and the varying room temperatures at different levels.

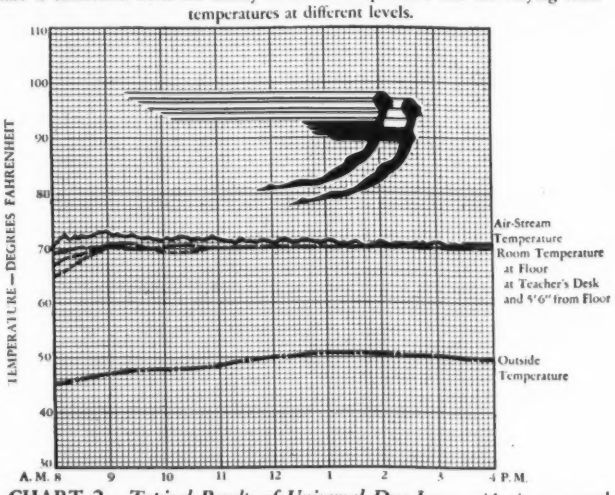


CHART 2—*Typical Results of Universal Duo-Luxe,* with air-stream and room temperatures syncretized. Room temperature is uniform throughout the entire occupied area; cold drafts and overheating cannot exist.

UNIVERSAL DUO-LUXE UNIT

JOHN J. NESBITT, INC.

Executive Office and Factory, HOLMESBURG, PHILA., PA.

NEW YORK OFFICE, 11 PARK PLACE

Sales and service through offices of the American Blower Corporation in principal cities of the United States and Canada.

Give Me THE GENUINE Natural Slate Blackboard Every Time

They outlast the building

THE ARCHITECT'S OPINION IS YOUR GUIDE TO ECONOMY

● The most valuable book you have ever read on school equipment will be ready shortly. It is free to school officials and architects. Write today and receive your copy.

***"In the past twelve years we have constructed one hundred and ten school buildings. In many cases these buildings were replacements of old schools which had been erected for fifty years or more. We often save the slate from old buildings and reset them in the new structure, even though the slate has been in use for half a century, and no doubt these old slate will be used and in good condition for another half century. It is for this reason we are still specifying Natural Slate Blackboards, and until an artificial slate is manufactured that will give the same service and which has proven to give the same service, we will continue to specify Natural Slate."**

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ROBINSON AVENUE ❖ PEN ARGYL, PA.

*Architect's name upon request.

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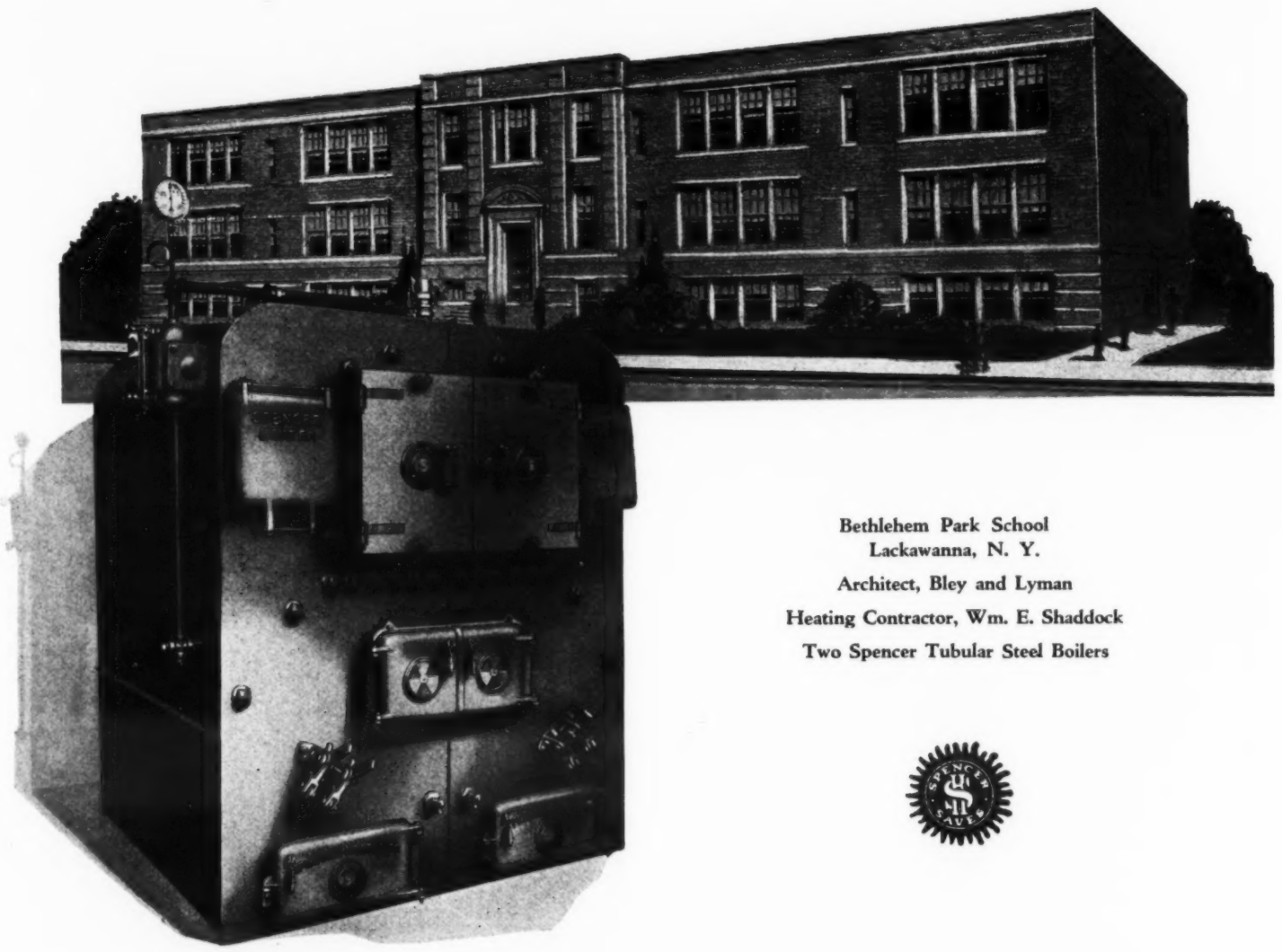

Bethlehem Park School
Lackawanna, N. Y.
Architect, Bley and Lyman
Heating Contractor, Wm. E. Shaddock
Two Spencer Tubular Steel Boilers

The principal reason for installing Spencer Boilers is that they give the highest heating efficiency at the lowest operating expense, due to burning low-cost No. 1 Buckwheat Anthracite or small size coke. This is PROVED by actual Cost Per Square Foot records. An additional reason, often very important at this season: Tests have shown that Spencer Magazine Feed Boilers can be erected in a smaller amount of time than other boilers. Write for names of Spencer installations in your vicinity. Also ask for our free book — Finding The Answer to The School Heating Problem.

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for steam, vapor or hot water

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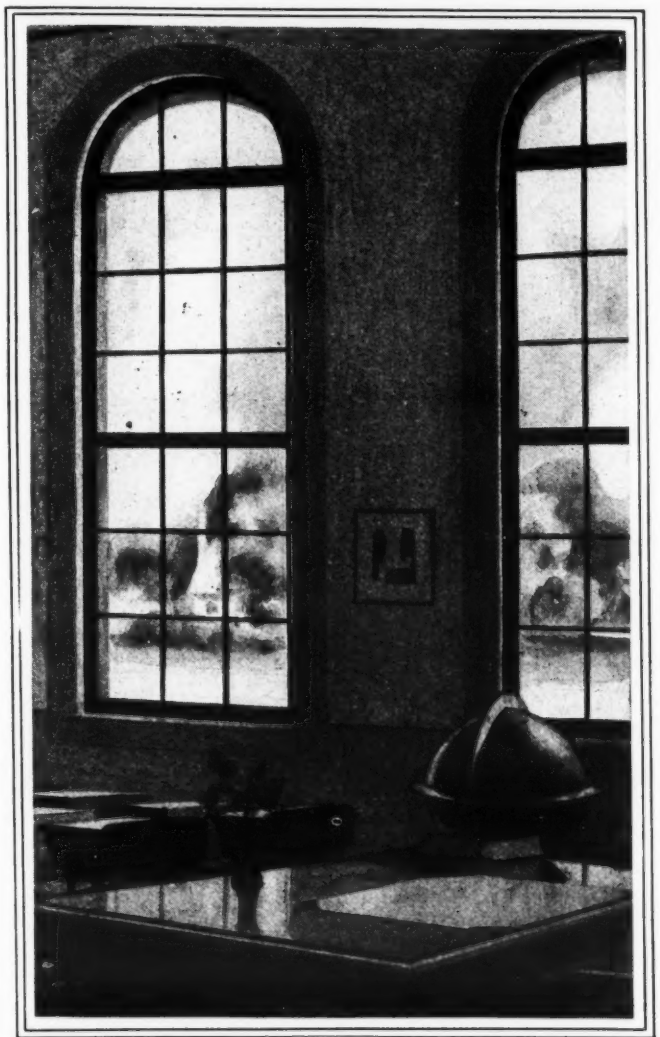

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The Johnson Thermostat on the wall of each room operates the valve on the heat supply of each room, automatically furnishing the temperature each room individually requires, and independent of all other rooms of the building. Included, are also Johnson Thermostats for controlling the valves and dampers of the building's ventilating system, and Johnson Humidostats for the control of the humidity. The Johnson system is the one accepted hygienically correct principle and mechanically right method of temperature regulation, the thoroughly complete system of control . . . . and installed in thousands of various buildings since 1885: its accuracy, dependability and permanence proven.

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WOODROW WILSON JUNIOR HIGH SCHOOL, TERRE HAUTE, INDIANA. Johnson System Dual Thermostats on wall of each room automatically maintain normal temperature during time rooms are in use, and lower (or economy) temperature when rooms are not in use: automatically turning steam on or off at predetermined hours. Control divided into 3 units: classrooms, gymnasium, auditorium—each unit operating separately.

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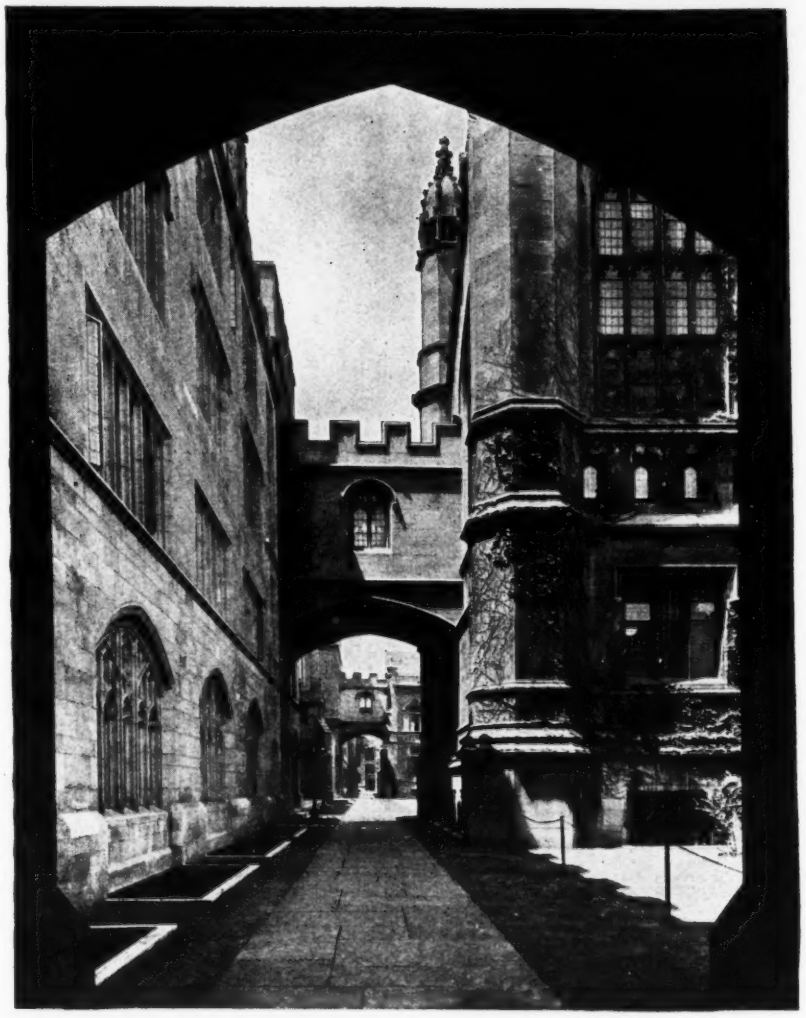
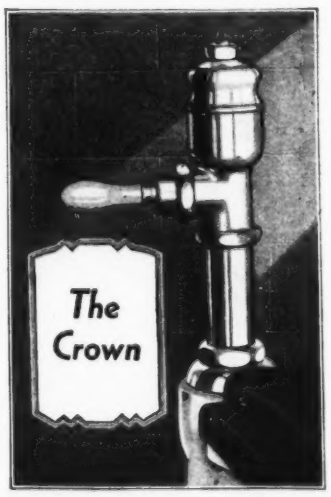


In America's Schools

Convincing evidence of the reliability of Sloan Flush Valves is their widespread use in school buildings, where, under extreme conditions of service, they have proved dependable, long-lived and efficient.



This is not surprising, however, when you consider that the Sloan Valve Company has been making flush valves—and flush valves only—for twenty-five years. Rigid adherence to the most exacting quality standards from the very first has brought undisputed leadership in the flush valve field—with Sloan Valves outselling all others combined.

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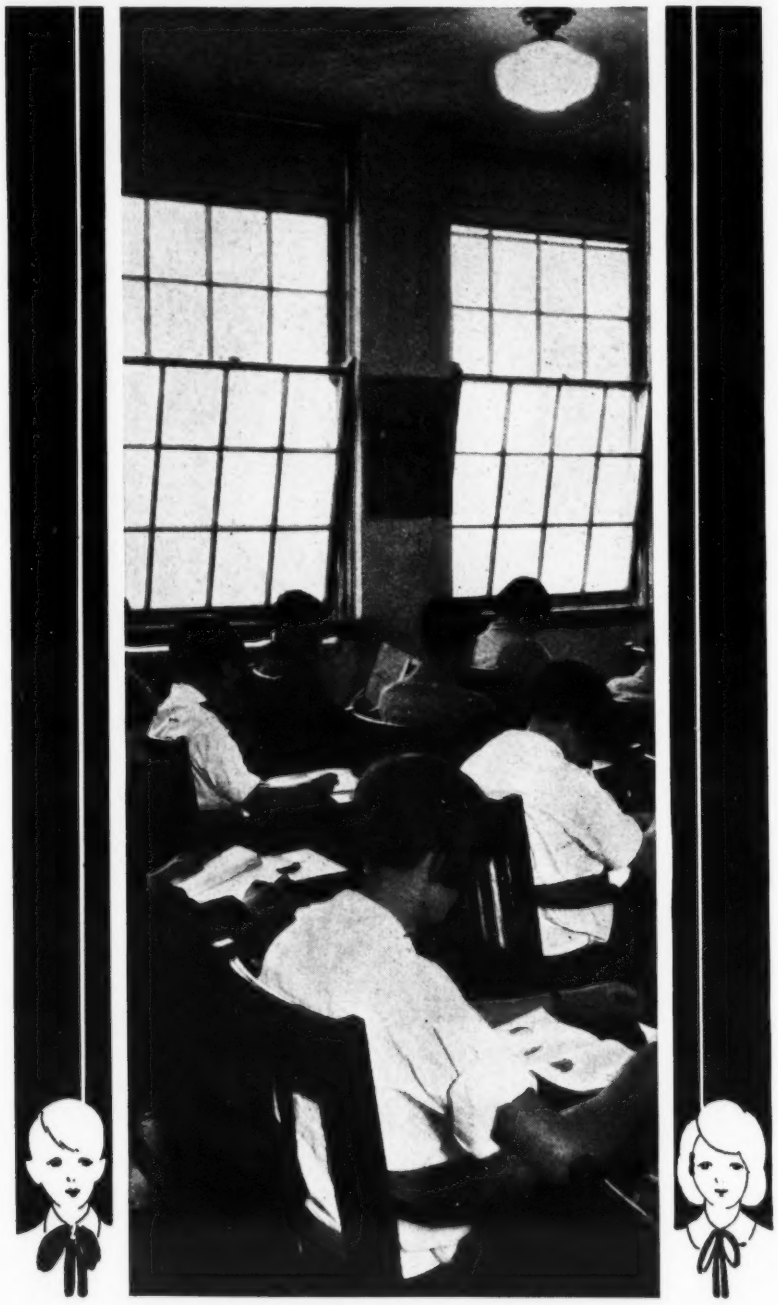
More than 6000 of the principal school buildings of America are equipped with Sloan Valves. Inspect any of these installations. It is to your advantage from the standpoint of economy as well as public health.

SLOAN VALVE CO • CHICAGO



Interior, Roxboro Junior High School, Cleveland Heights, Ohio.
John H. Graham & Co., Archt., Cleveland, Ohio.

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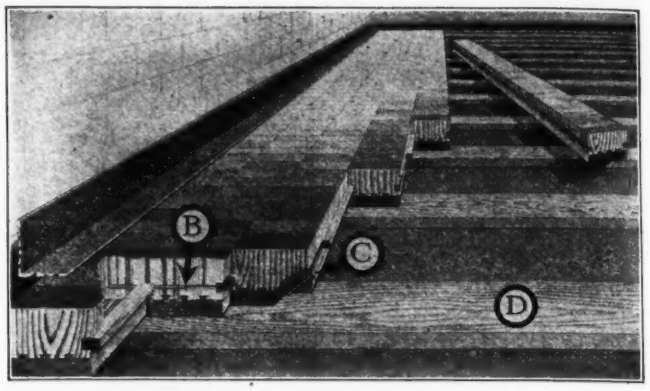
INSTALLED OVER THE WEEK-END



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Accurately Milled *The Tough End-Grain up*

THE MODERN IN DESIGN

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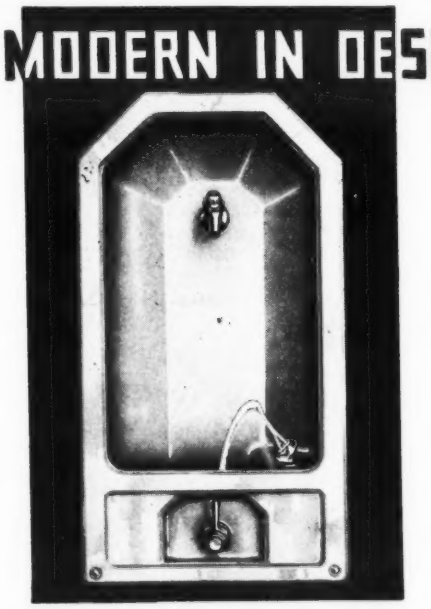

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THE modern trend in design, now so prevalent in many of our schools and skyscrapers, finds expression in Halsey Taylor Drinking Fountains, too. Here is a recess type, designed to harmonize with interior modern treatment—a design as modern as the distinctive features of the fountains themselves, such as practical automatic stream control and two-stream projector.

THE HALSEY W. TAYLOR CO. • WARREN, OHIO

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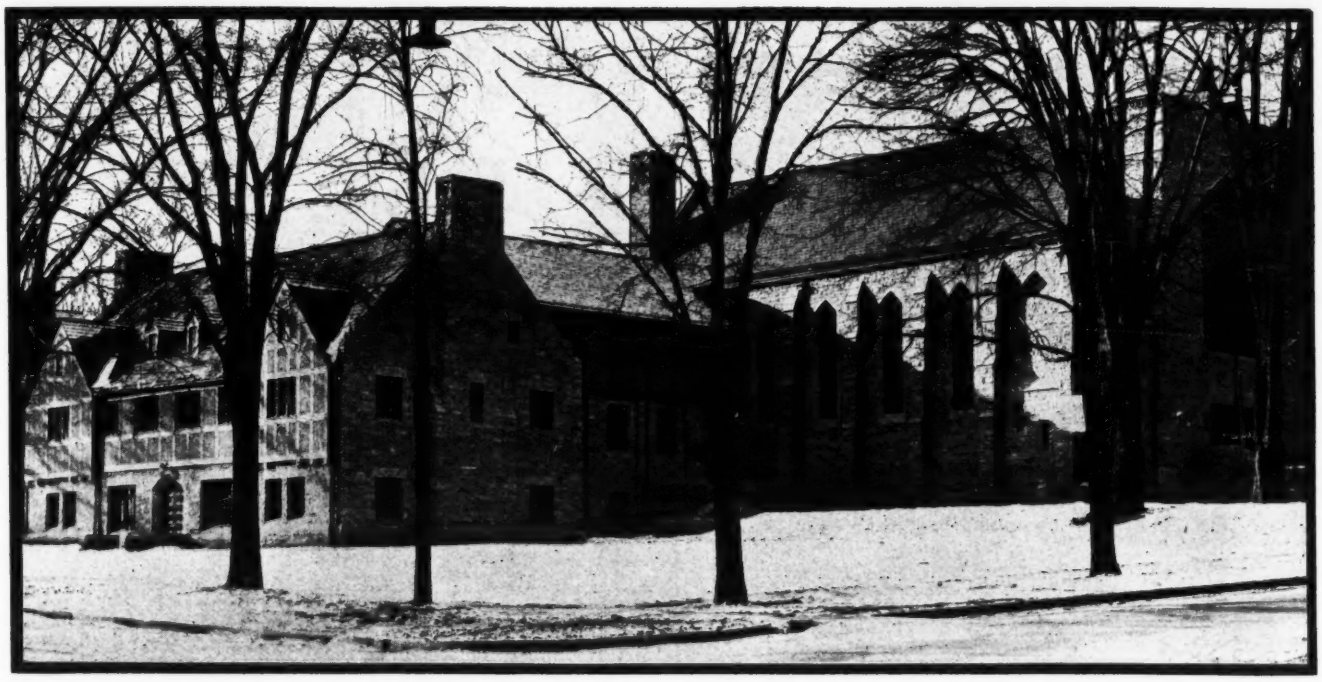

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A Minneapolis-Honeywell Installation ... The Modutrol System of Zone Control Applied to Warm Air

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FOR SCHOOLS, CHURCHES AND OTHER BUILDINGS

ZONE CONTROL not only automatically provides desired temperature WHERE it is needed, but WHEN it is needed as well. It co-ordinates the heating plant with the individual demands of the various zones or sections to maintain the desired temperature in each as governed by time, occupancy, exposure and weather conditions.

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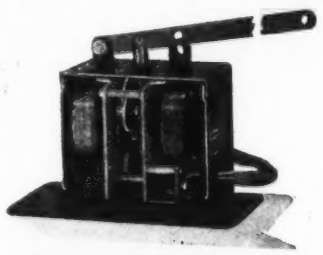

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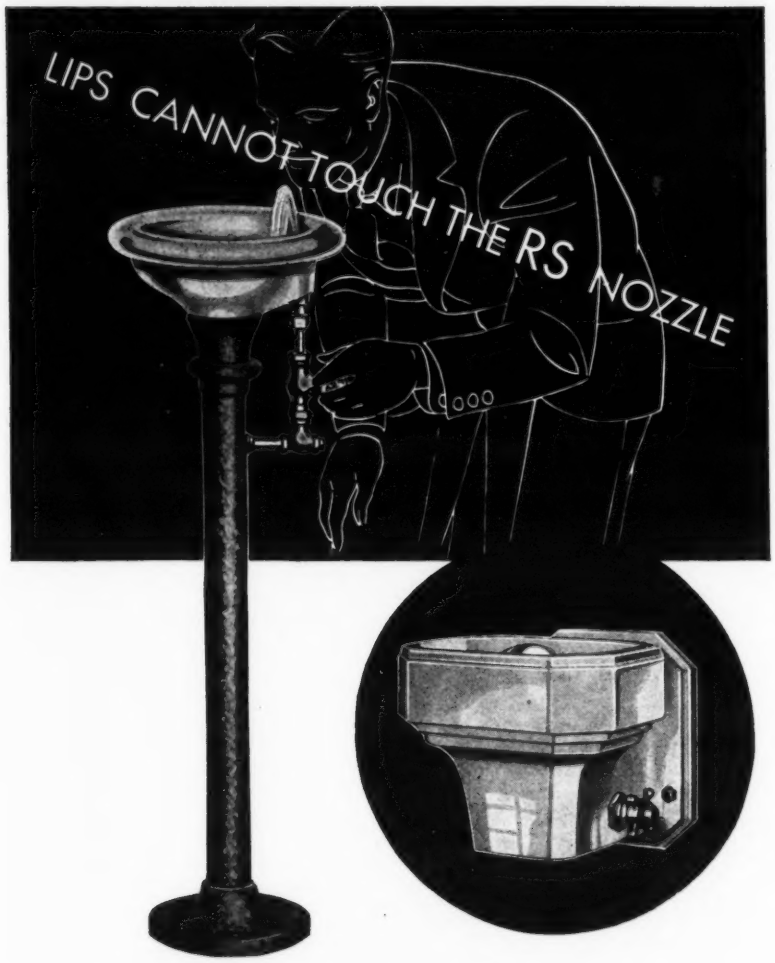

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MAKES PROTECTION AN ACTUAL FACT

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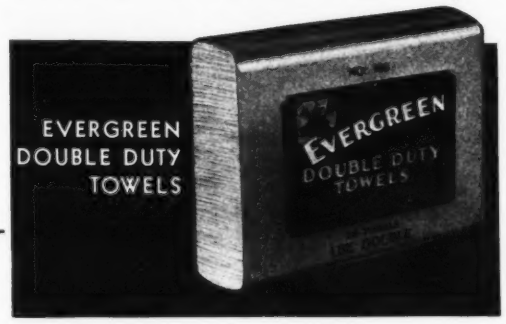

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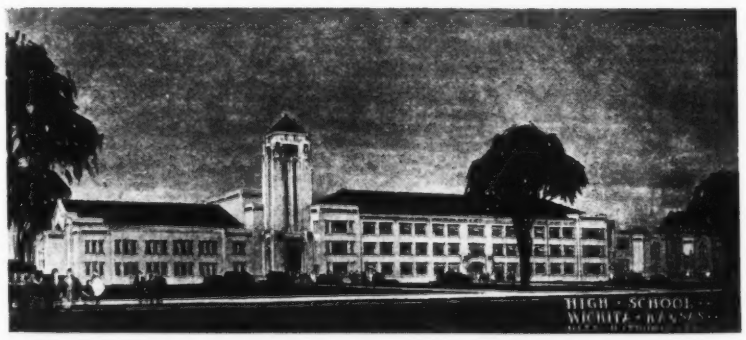

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In twenty minute . . . he ees dry . . . TRY HEEM!

• This is what one janitor says about Glo-Coat. Hundreds of others are equally enthusiastic. They say Glo-Coat is better than any similar product they have ever used.

Send for a big can of Glo-Coat (free). Test it out on asphalt base, rubber, cork, linoleum or wood floors. Mail the coupon.

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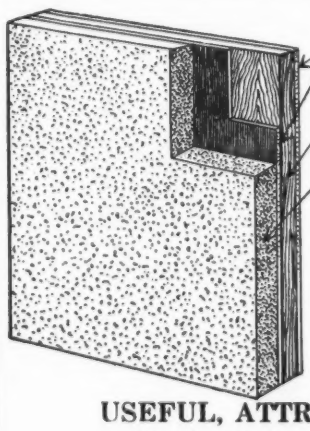

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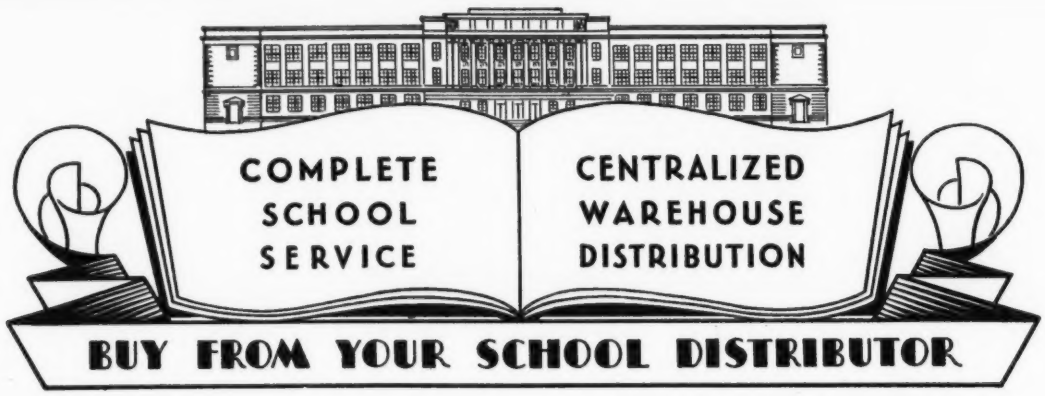

Should Salaries Increase Or Decrease?

Business is improving. Prices of commodities are going to become stronger. They should, they must, they will. The degree to which they become stronger, to that degree will business become better. Shall we fight to keep prices down and with them wages and salaries, or shall we welcome increased prices of commodities and with them a return of normal wages and salaries and a return of normal business?

Two agencies can encourage or retard this movement — the Buyer and the Seller. Price cutting on the part of the sellers will do a good job of retardation. Those who participate in it are enemies to business recovery, are apostles of low quality products, low wages and salaries, and are doing their bit to prolong the suffering and want and unemployment that has affected ten million people directly and the rest of the population indirectly. The buyer who welcomes this practice of price cutting is a party to the plan.

Price "chiselers" among buyers and purchasing agents by deed and action endorse 1930, 31 and 32 business conditions. They insist upon buying at a price which robs the employee of his living wage and the manufacturer of his inducement for producing dependable products. They should welcome gladly a strengthening of commodity prices. They would and should resist budget reductions that would rob themselves of their just compensation for service rendered. They demand their fair price and they should have it. They cannot and should not have it unless they in turn are willing to do their part that others may have theirs also.

"Buying short" is another practice that is retarding business. Some purchasers almost boast that they are buying only fifty per cent of normal requirements. They are cutting out or greatly reducing essential supplies and equipment for teaching purposes in order that budget reductions may be met without salary reductions. It has been done. Such a policy undermines confidence, curtails employment, produces chaos, and pyramids inefficiency.

Strengthening of commodity prices and normal buying requirements are essential for increased consumption—for tax paying ability — for the restoration of 10,000,000 unemployed people to their inherent right to make an honest living at an honest wage and the restoration of another multitude now on reduced hours to full-time employment.

In advising or permitting Boards of Education to skimp on school requirements, do not forget the fate of the 10,000,000 who cannot find work. Put yourself in their place and decide how long you would want to remain there. Keep them in mind when you demand goods below cost. Keep them in mind when you consider curtailing needed school purchases fifty per cent. Keep in mind another 10,000,000 who are on part-time employment or greatly diminished weekly wage.

The buyer and seller have an obligation as binding as the Golden Rule. First, to so conduct the buying and selling that the 10,000,000 unemployed will find a market for their labor; second, that the employee because of improved business conditions can realize a living wage; and third, that there must be normal buying before there can be normal employment and normal wages and salaries. Until such time arrives, every man should take his proportionate cut.

It is fine to practice the Golden Rule in living. It is not enough. We must practice it in Buying — in Selling. "Thou Good and Faithful Servant" has taken on a new meaning. He is the one who welcomes a rising market and gladly pays the price. He is the one who buys normal school requirements. He is an advocate of the full dinner pail, not in the hands of charity, but in the hands of the employed. He is no longer snug in his own content, but mindful of the less fortunate outside the factory gate.

We have all "enjoyed" the depression sufficiently long. Let us pay the price and get out of it — the price of an honest product and an honest profit, the price required to adequately man the schools with equipment and supplies.

Consumer demands can revive Industry. The School Industry is dependent upon the school purchasers' requirements alone. If the buying is normal, the Industry will become normal. This Industry is one of the essential cogs in the machinery of business recovery.

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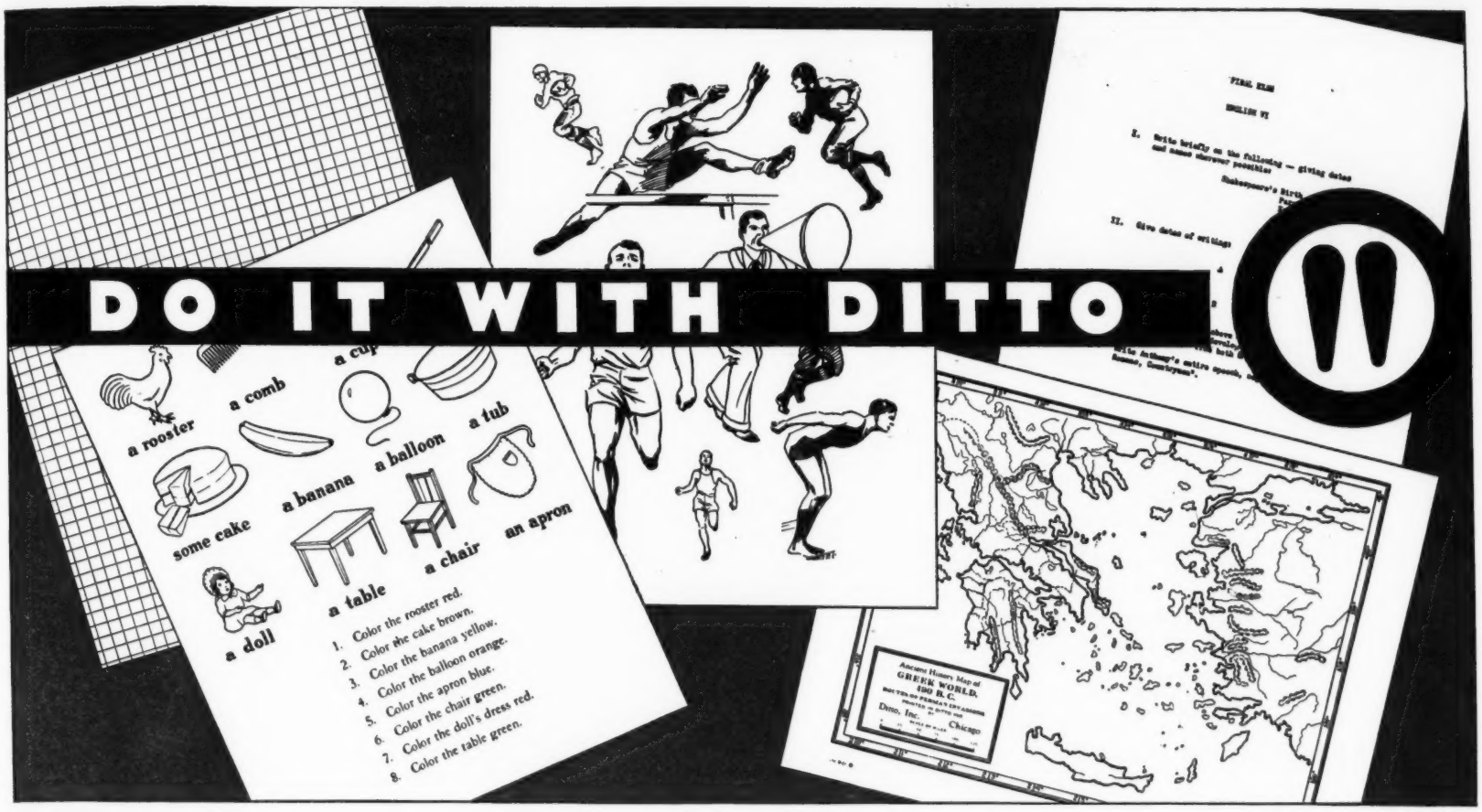

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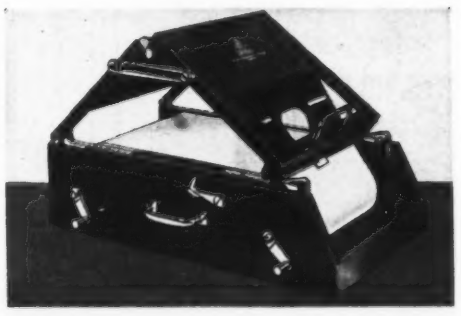

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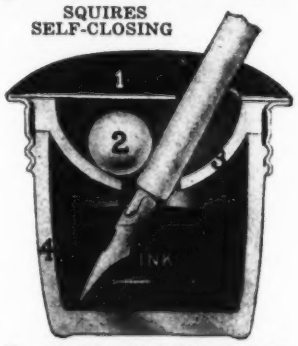

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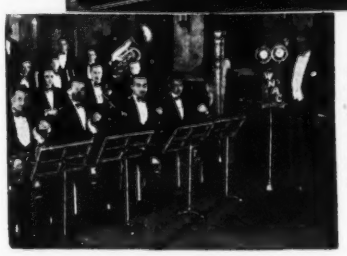

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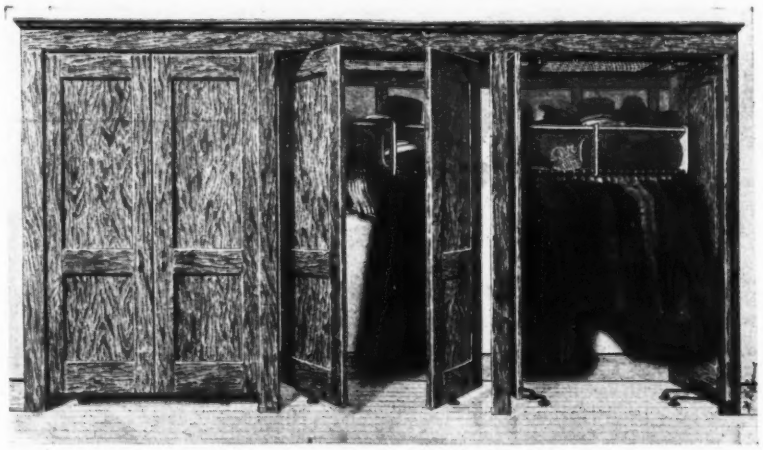

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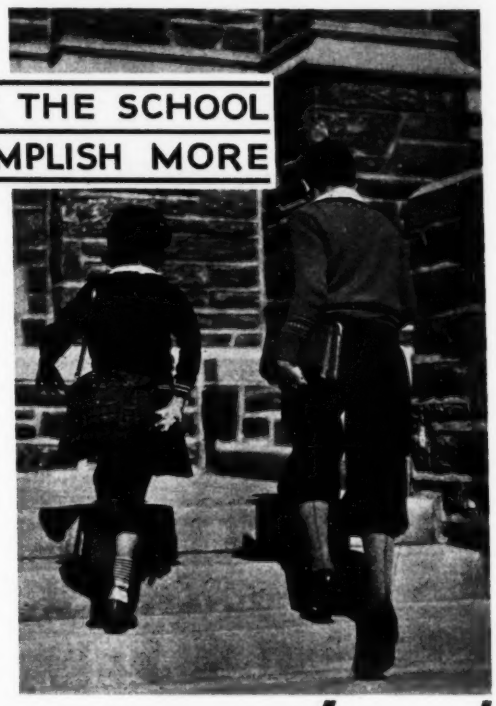

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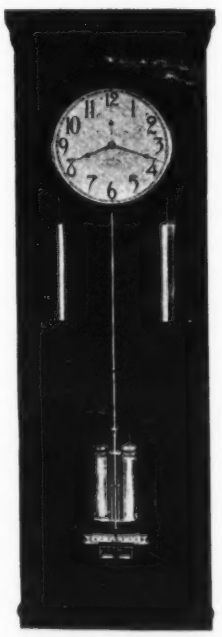

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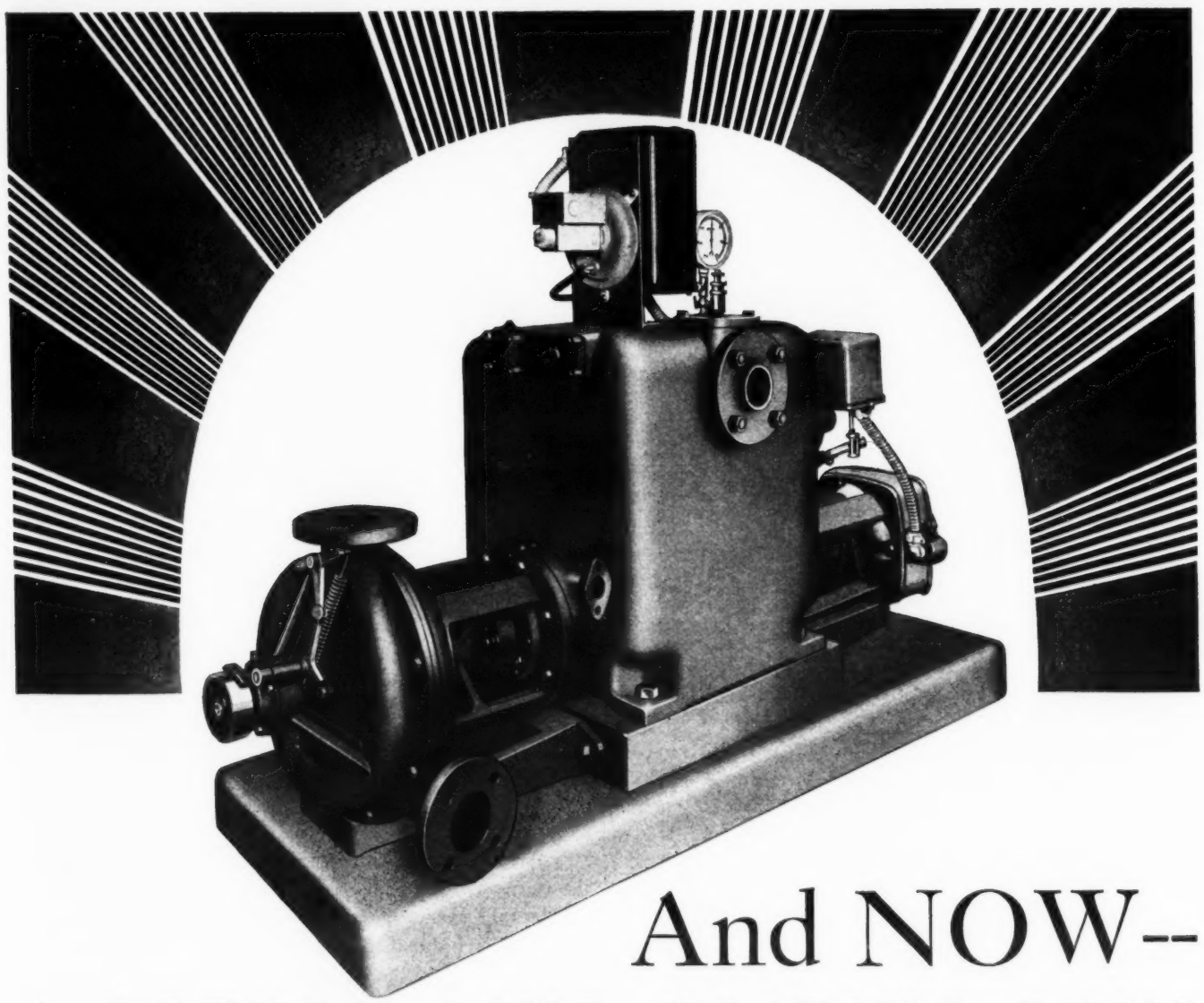

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In time of storm and distress the ship seeks a harbor of refuge. The economic disturbance which has raged and is still raging has demanded calm and dependable guidance. This guidance, as far as the educational interests of the land are concerned, has in part at least been provided by the educational press. Its outlook has been judicious, free from momentary hysteria, and free from the irrational and impractical.

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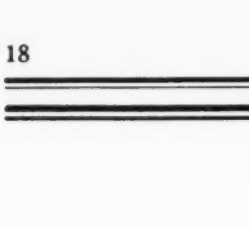

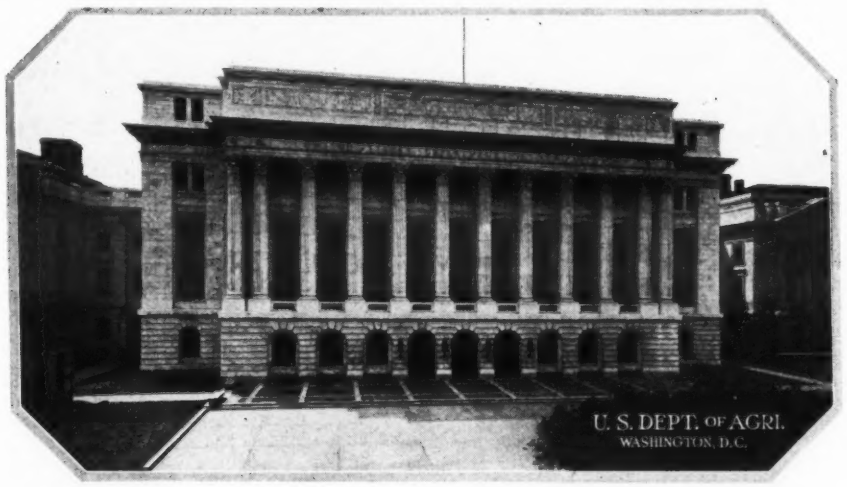

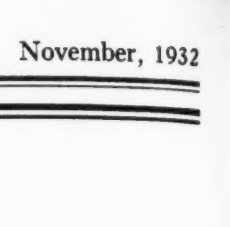

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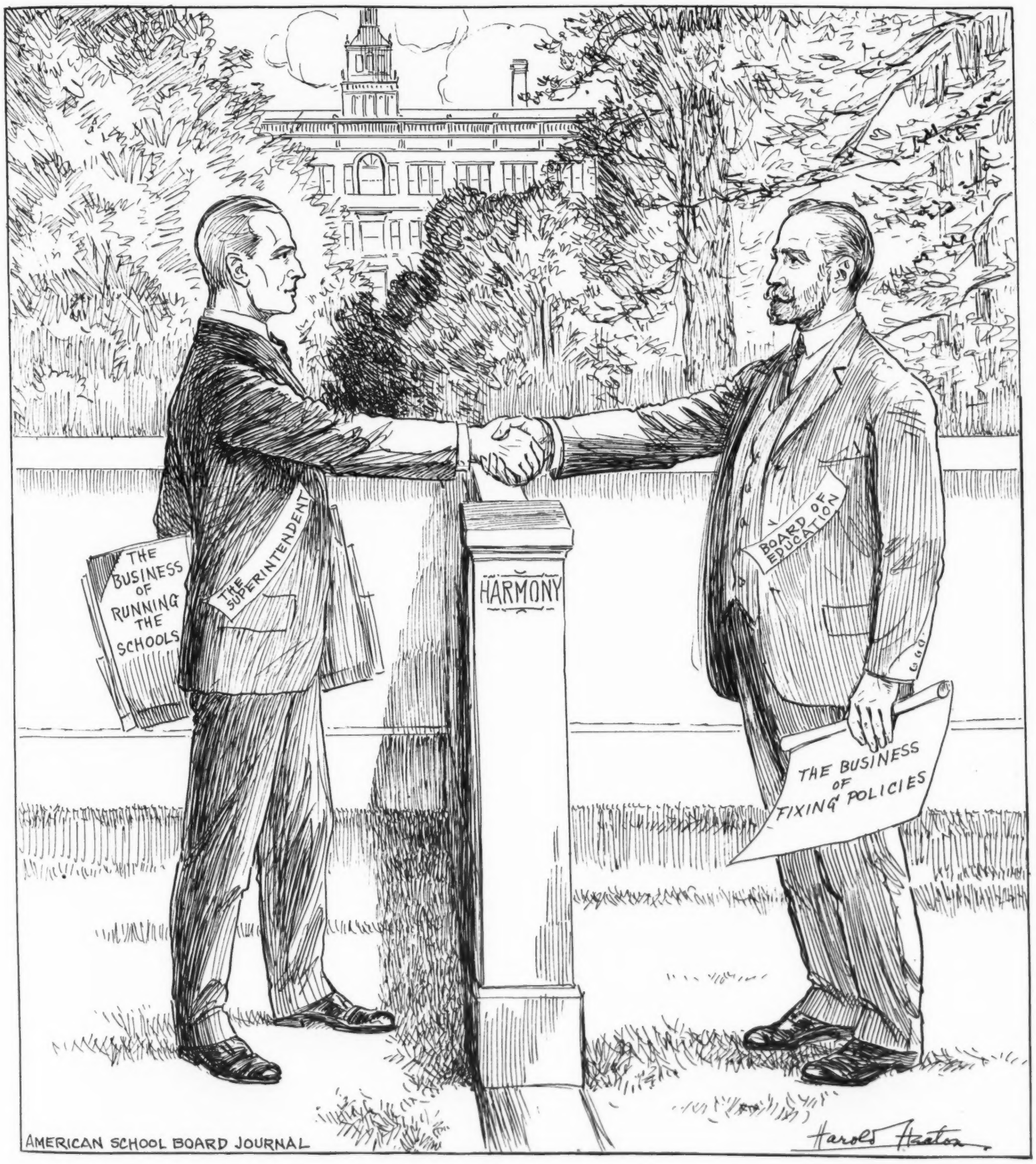


EACH ON HIS OWN GROUND

Consolidation of Schools and Transportation of Pupils, 1929-30

David T. Blose, Assistant Statistician, U. S. Office of Education

In spite of the feeling among many that there should be retrenchment in public expenditures, consolidation of rural schools and the transportation of pupils to centrally located schools in larger areas continues to be extended. The number of pupils transported and the amount of money expended for transportation increased more during the 1928–30 biennium than during any two previous like periods since the beginning of this service. The conviction that the state owes every child an opportunity to secure an education, and, if the child lives outside of walking distance from the school, that he should be transported at public expense, continues to grow. In this study on transportation and consolidation it is impossible to report completely all items, due to the fact that all data are not available in some states. The column totals in some instances, therefore, do not include data from all states.

The accompanying table is composed of eleven columns. These show the states, the number of school buildings, the number of one-room schools, the total teaching positions, the percentage of teachers in one-room schools, the present situation with regard to the number of consolidations, and the extent and cost of pupil transportation in the various states, omitting the District of Columbia.

The total number of school buildings in 1930 was 247,119, which is 7,441 less than for the year 1928. In 1916 there were 281,524 school buildings reported by the various states. This is 34,405 more than was reported in 1930. Although many new buildings have been built, the average net decrease has been 2,150 a year during the past 16 years.

The total number of one-room schools in 1930 was 148,711. In 1918, when one-room schoolhouse statistics were first collected, there were 195,000 one-room schools reported. This gives a difference of 46,689 or an annual average net decrease of 3,335.

Omitting the 2,599 teachers in the District of Columbia, there were 839,879 teaching positions in the United States during the year 1929–30. There were 631,757 teaching positions in 1917–18, giving an increase of 208,122 positions during the 12-year period, distributed as follows:

1918 to 1920	23,832
1920 to 1922	47,686
1922 to 1924	42,541
1924 to 1926	47,351
1926 to 1928	25,987
1928 to 1930	20,725

It will be observed that the increase in the number of teachers is getting less each biennium. The number of elementary teachers has about reached the saturation point but the number of high-school teachers continues to increase due to the rapid increase of enrollments in the public high schools. The percentage of teachers employed in one-room schools ranges from 1.6 in New Jersey to 53 in South Dakota. The average of all states is 18 per cent, a decrease of 3.5 per cent for the biennium ending June 30, 1930.

There were 16,232 consolidated schools reported by 44 states. Twenty-three states reported 1,014 new consolidations during the year 1929–30.

There were 1,902,826 pupils transported at public expense during the year 1929–30 in 44 states. The 36 states that reported the number of pupils transported both during 1927–28 and 1929–30 show a gain of 327,089 pupils transported, or a percentage gain of 26 for the biennium.

Forty-one states reported a total of 54,450 motor vehicles and a total of 3,566 horse-drawn vehicles used for the transportation of pupils.

Rural-School Consolidation and Transportation, 1929–30

	Total Number School Buildings in State	Number of One-Room Schools	Total Number of Teaching Positions in State	Per Cent of Teachers in One-Room Schools	Number of Consolidated Schools: Total	Number of Consolidated Schools: Established in 1929–30	Number of Pupils Transported at Public Expense	Number of Pupil Transportation Vehicles Operated at Public Expense: Motor	Number of Pupil Transportation Vehicles Operated at Public Expense: Horse-Drawn	Total Amount of Public Funds Spent for Transportation
1	2	3	4	5	6	7	8	9	10	11
Continental United States	247,119	148,711	839,879	18.0	16,232	1,014	1,902,826	54,450	3,566	$54,823,143
Alabama	5,754	2,896	16,567	17.5	643	49	66,499	2,175	23	$ 1,418,584
Arizona	538	172	3,163	5.4	67	2	.....	.....	.....	291,975
Arkansas	5,371	3,141	12,574	25.0	353	173	24,173	643	12	169,980
California	7,400	[2]1,519	36,768	4.1	[2]172	....	95,000	1,000	....	2,500,000
Colorado	3,208	1,855	9,744	19.0	167	....	15,616	512	1	1,002,751
Connecticut	1,390	463	9,811	4.7	.....	.....	26,220	650	....	927,011
Delaware	363	178	1,420	12.6	56	1	5,957	299	21	194,368
Florida	2,157	[2]946	10,547	9.0	.....	.....	44,161	700	....	1,031,768
Georgia	6,173	3,522	19,071	18.5	926	109	77,762	[3]1,983	....	1,053,850
Idaho	1,507	865	4,500	19.2	41	....	5,000	130	40	389,412
Illinois	14,209	10,072	47,766	21.1	109	1	.....	.....	.....	617,517
Indiana	3,545	2,054	21,847	9.4	992	5	159,748	6,372	689	4,764,896
Iowa	11,820	9,358	24,585	38.1	379	2	46,556	1,909	860	2,224,013
Kansas	9,196	7,420	19,141	38.8	174	....	7,207	494	15	565,322
Kentucky	8,009	6,089	15,323	39.7	197	11	14,487	[3]513	....	282,502
Louisiana	2,987	1,381	12,173	11.3	317	....	87,703	[3]2,363	....	1,872,237
Maine	2,580	1,781	6,191	28.8	[2]15	....	14,942	500	100	671,834
Maryland	1,865	1,024	8,461	12.1	329	....	22,814	779	....	624,913
Massachusetts	2,847	498	26,203	1.9	.....	.....	60,000	1,100	50	1,883,867
Michigan	8,865	6,209	33,735	18.4	274	12	[4]18,545	[4]770	....	773,986
Minnesota	9,102	6,995	22,169	31.6	406	1	36,226	1,543	186	1,726,227
Mississippi	5,715	2,897	15,138	19.1	988	....	114,836	3,851	339	2,188,975
Missouri	[1]9,810	7,352	24,200	30.4	406	....	[4]8,209	130	50	[4]150,000
Montana	3,539	2,693	6,033	44.6	69	....	.....	.....	.....	589,643
Nebraska	7,565	6,047	14,727	41.1	83	....	8,500	240	3	321,881
Nevada	310	185	794	23.3	13	....	.....	.....	.....	101,081
New Hampshire	990	559	2,961	18.9	15	....	6,981	[3]872	....	435,733
New Jersey	2,328	407	25,404	1.6	56	3	63,000	.....	.....	2,158,778
New Mexico	1,040	618	3,400	18.2	375	9	[5]9,034	430	6	553,335
New York	11,760	7,796	74,961	10.4	521	33	23,241	889	93	1,900,466
North Carolina	5,825	2,096	23,375	9.0	[2]951	....	181,494	3,960	86	2,273,288
North Dakota	5,107	4,270	8,410	50.8	446	[5]	29,917	.....	....	1,009,494
Ohio	7,761	4,258	41,432	10.3	693	160	157,302	[3]5,041	....	4,784,786
Oklahoma	[2]5,868	2,600	19,807	13.1	[2]447	....	58,376	1,480	6	1,116,648
Oregon	[2]2,681	1,302	6,208	21.0	[2]130	....	9,037	[2]348	....	741,445
Pennsylvania	13,211	7,089	57,716	12.3	648	76	65,329	2,513	553	2,903,712
Rhode Island	476	84	3,900	2.2	24	2	2,500	95	5	120,269
South Carolina	4,093	1,791	13,398	13.4	[5]406	....	42,000	1,550	....	964,850
South Dakota	5,360	4,744	8,943	53.0	106	2	5,823	318	....	434,881
Tennessee	6,031	3,091	17,695	17.5	890	37	32,404	825	321	803,641
Texas	12,236	3,525	35,667	10.0	1,540	265	74,920	[3]1,916	....	1,290,523
Utah	661	91	4,452	2.0	.....	....	19,172	319	58	499,134
Vermont	1,373	1,075	2,825	38.1	50	....	6,694	.....	.....	318,576
Virginia	5,618	2,765	16,477	16.8	[2]812	....	58,824	1,405	....	971,064
Washington	2,645	960	11,140	8.6	406	39	50,332	1,582	15	1,723,631
West Virginia	6,383	4,289	15,837	27.1	329	....	23,526	368	16	510,930
Wisconsin	8,326	6,642	20,239	32.8	78	....	14,024	1,639	3	514,982
Wyoming	1,521	1,047	2,981	35.1	133	14	8,735	444	35	454,384

[1]Statistics for 1925–26.
[2]Statistics for 1927–28.
[3]Total vehicles used.
[4]Partly estimated.
[5]Statistics for 1929.

A few states reported the total number of vehicles used. These are listed in each case under motor vehicles.

The total expended for pupil transportation in the 48 states amounted to $54,823,143 in 1929–30. Forty-five of these states reported an expenditure of $39,952,502 during the year 1927–28. During the year 1929–30 the same 45 states spent $49,131,417, or a gain of 23 per cent in money expended. The average cost per pupil for transportation in states reporting both number of pupils transported and cost of transportation was $28.12 during the year of 1927–28 and $27.14 for the year 1929–30, or a decrease of 98 cents or 3.5 per cent per pupil transported.

What Can They Sell?

Emily Guiwits

Secretary Brown, of Dotville, looked thoughtfully across the table at Secretary White, of Dashville. "What a nation of extremists we are," he said. "And most unfortunately, I'd say in the matter of vocations."

"You're thinking of these unemployed teachers," answered Secretary White. "I've thought the same thing myself, especially this year. Suppose a grade vacancy occurs — in fact, one did occur last month. How many applicants do you think we had? Forty-three! All formally qualified, and perhaps six who ought to be in the schoolroom. How did the others get there? What headed them into teachers' colleges instead of into work where they really belong?"

"If I were to give a reason it would be a double-header," replied Secretary Brown. "First, mob psychology. Second, the clever propaganda of the teachers' colleges. No study of a freshman's make-up to see if he's teacher-material. Just herd 'em in, run 'em through the machine, and let the elimination come later. This started, probably, during the teacher-shortage after the outbreak of the war."

"You've stated the facts exactly," agreed Secretary White. "The teachers' colleges were backing the other colleges to the wall. But they've had a setback this year, in the fact that they can't place their product."

"Yet there are no more real teachers than we need," objected Secretary Brown. "One great trouble is the poor distribution in subjects. Ten will come running when we need, say, English and history: but let us ask for biology with bookkeeping and Latin, perhaps, and we'll look far before we find that line-up. This brings us to another problem: what should we tell these freshmen to register for when they go to college next fall?"

Secretary White smoked a few minutes in silence. "You've offered two problems instead of one," he said finally. "First, finding out what the youngster has natural fitness for. By the

(Concluded on Page 74)

Financing the Public School*

Raymond A. Kent, President, University of Louisville, Louisville, Kentucky

The Eighteenth Amendment seems to be the only question before the American public today that brings forth more divergent opinion than that of the support of public education in the present emergency. Last week I read that the University of Illinois had made a saving of approximately 22 per cent for the biennium in the funds appropriated to it by the last general assembly. "President Chase explains that 'these savings have been made by the University in view of the difficult position in which the state has found itself as a result of decreased and delayed taxes.' "[1]

An address delivered by a national leader of education last winter sums up the question by saying, "The issue before the American people is not, 'Can we afford to maintain the educational service?' but rather, 'Can we afford not to maintain it?' " His last sentence is, "I believe that we should call upon our people to bear the burden of taxation, and, if need be, to suffer privation, in order that we may insure to ourselves and to our posterity life, liberty, and the pursuit of happiness."[2]

Another outstanding educator early last spring stated publicly that "in educating our youth we should have a deep concern that farms and factories and savings and means of livelihood be not overtaxed. As citizens of the state with its welfare in mind, we should scrutinize expenses and revenues with the greatest care."[2]

The National Education headquarters a few months ago, sent out a communication accompanied by a pictorial sketch of a tree representing the "School budget," the branches of which are labeled "elementary and high school," "health," and "kindergarten," respectively. Beside the tree stands an unnamed person with ax in hand. Through the branches, out of a megaphone labeled "public," comes the message. "Touch not a single bough."

Aiding the Depression

On the one hand, a prominent educator says that "it would be wiser to increase both current expenditures and capital outlays" in order to aid in the depression. On the other hand, we read on the front page of a recent daily, first, that the internal tax receipts of the government dropped 873 millions during the past year; and second, that the board of education of Chicago invited a committee of bankers to sit with it to advise how to raise money to meet its current obligations and to determine whether schools could be opened, and if so, how they are to be financed.

Frankly, I am of the same opinion as that expressed by the young man who, when asked by the young lady why he didn't say anything after he had proposed and she accepted, replied, "There's been too much said already!" But though embarrassed, as he was, I must keep my promise to say something more.

And my first word is an appeal. Let us try to have reason guide us instead of being impelled by emotion and resulting hysteria.

No person genuinely interested in the welfare of children can deny the seriousness of present conditions and their far-reaching future effects on our children and youth. Some school districts are always at the very brink of inefficiency, and underprivileged groups included in these districts should be the last to feel the pinch of retraction. They are, however, the first to be affected. To close public schools, as has been done, is nothing short of a calamity of the gravest social, and even political, order. Children *are* the citizens of tomorrow; their physical, intellectual, and moral welfare is, without any question, of the highest import.

Even if the unshakable verity of these statements be granted, still not all the considerations of an emergency such as the one in which we now find ourselves, have been accounted for. Briggs has thrown out a challenge which can scarcely be disregarded, particularly in these straitened times: "If the purpose of public education is to make every individual better able and better disposed to contribute to the betterment of society, then a large part of the popular school program is resulting in lamentable wastes of public funds and in prostitution of the labors of large numbers of pupils."[4]

The most unfortunate aspect about the schools in the present situation is that, to many laymen at least, "school teachers" seem to be waging a contest in defense of themselves and especially in defense of their salaries. As a group, we appear to be more artisan-minded than professional-minded. Wage is one thing; the educational welfare of the child is another, though, of course, there is a close relation between the two. It is to be deeply regretted that the method of our approach to the school's present emergency problems has suggested a greater interest in the former than in the latter.

Utterances condemning any school retrenchment at present are unfortunate. Whatever the authors' intentions, such expressions make it appear that the school itself is intrinsically different from the rest of society, that government should treat it differently, in short, that it should be, largely or even entirely, shielded from the unfortunate current experiences which are the portion of all the rest of society. Obviously, all parts of government are not of equal importance to society, and doubtless a consensus of public opinion would unhesitatingly pick public education as one of the most important duties of government. Nevertheless, the method of approaching the issue is, for several reasons, of determining importance.

The Place and Function of the School

Look for a moment at certain well-known facts which are of significance here. Communities throughout the country, in both industrial centers and agricultural areas, find large numbers of their citizens without the bare necessities of life — food, clothing, and shelter. In order that these needs may be met, special funds are being provided from both public and private sources. Funds received from the latter sources are gifts; from the former, taxation. The situation with regard to taxation, however, is also tense. In the first place, many property owners have no money with which to pay their taxes. Values in real estate have shrunk, as in other commodities, with the result that the same tax levy cannot possibly bring the same amount of income as formerly. In addition, communities find their public funds exhausted. In some areas the highest tax levies which the law allows are already operating, and still human beings stand suppliant for basic physical needs. The health of children and adults is suffering. Finally, the greatest organization for peace purposes that this republic has ever known was at work to raise funds through personal contributions to help dull the edge of need and suffering during the past winter. What next winter will bring remains to be experienced. In the face of this calamity, which this country shares with the world, we hear it asserted that reduction of support for the school must not be permitted. Such an attitude should give food for serious thought.

In the first place, the school still needs to understand society more thoroughly. It has made great progress in the past few decades in this direction, but it still has some distance to go. For the school to will that it shall be treated in a manner which the rest of society has no reasonable hope of experiencing is but to widen the gap still further, to forfeit much of the vantage thus far gained. It is at present painfully futile to argue this separate treatment on the ground that similar treatment smacks of politics. If the impossible should happen and the school should be exempt from the common financial ills of this time, what ground of social experience would remain out of this crisis which would be common to school and society?

On the other hand, this proposed policy of isolation would make it still more difficult for society to understand the proper place and function of the school. Not less than 20,000 persons, it is estimated, committed suicide in the United States last year. For the past 30 years the death rate has been above 17.8 per 100,000 people. In 1931 it rose to 20.5. The figure went higher than this only in the panic year of 1908 when it reached 21.5, and in the war depression year of 1915 when it stood at 20.8. In 1921 the Mutual Life Insurance Company paid $880,871 in claims for acts of suicide; in 1931, $6,494,254. In 1921 the sum was 1.9 per cent of the company's total claims; in 1931 the proportion was 4.4 per cent.[5] Unless American social theory has changed overnight, the home still remains the basic social administrative unit in child welfare. The present situation reveals American homes by the thousands in conditions of abject poverty, with would-be wage earners driven to despair. Let one judge for oneself how it sounds to the ears of these sufferers to hear the school say, "We are doing our best to keep our organization immune from the whole situation." Let it be conceded that education is of first importance among the functions of the state, such an incongruous situation still reminds one of the causes of the Russian Revolution.

Financial Support in the Schools

The net result of such a stand would be mutual alienation, increasing the lack of understanding and bringing the opposite of good will and confidence. Good will and confidence are what the school needs; in fact, it can never accomplish its real function without them. No social instrument or means can succeed without these elements of support. Nor does this assertion have in mind chiefly the influence of these factors as determiners of the financial support requisite for the school. If a public school were sufficiently endowed that it need not depend on the public for financial support, it still could not function properly without the good will of its constituency. An organization cannot itself be essentially unsocial in character and at the same time perform a social service.

Some will, of course, argue that the school has never had the financial support which it deserves and that hence it has more justification for defending itself at this time against financial inroads. Let the reader be again reminded that the assertion is not equally true in all communities and that, indeed, it may not be true at all in some. However, let that consideration pass for the moment, and grant temporarily that the school never has had its due support. Is the fact

*An address delivered before an Educational Conference at Northwestern University, July 26, 27, 28, 1932.

[1] *Chicago Tribune*, Editorial, July 7, 1932.

[2] George D. Strayer, "Adequate Support of Education the Condition of Effective Service," in *School and Society*, March 19, 1932.

[3] Lotus D. Coffman, "Education and the Depression," an Address at Schoolmen's Week, University of Minnesota, March 25, 1932.

[4] Thomas H. Briggs, "Co-operating in Economy," *School and Society*, XXXIV (November 28, 1931), pp. 718–24.

[5] *Literary Digest*, July 9, 1932, p. 7.

of supreme importance? Is there no other human value comparable in importance with formal education in its present form, which society seeks to conserve? One has not far to seek for an answer. Those who have so quickly and stoutly declared, "Hands off the school appropriation," list among their numbers some who have launched the most severe attacks against the school, openly intimating that, from the standpoint of educational efficiency, money has been wasted.

Suppose that not one cent has been wasted. Suppose that returns have indicated the highest possible efficiency. It is still vital to ask whether the school has ordinary human obligations. We now face the greatest crisis peace has ever brought us. What is to be the school's social perspective in this issue — artisanlike or professional? Has the school a real social philosophy? Will the school seek in this exigency better to understand and be understood by society? Will the attitude of the school indicate that it thinks itself an inseparable part of the social fabric or that it believes itself merely an outside attachment?

So far, I have indicated very briefly what seems to me to be the educational philosophy which should guide whatever action we may judge to be best in the present situation.[6]

Reorganizing Educational Programs

Next may I say that the present offers the most opportune occasion that America has seen for many decades, to reorganize our programs of public education, especially by states. Yet no state has done it, so far as I know. There are things that can be done "in the way of redistricting, establishing larger units, consolidating certain agencies, and actually abandoning others. Such measures, if wisely planned," would not only save money, but would actually improve our educational service. With the supply of teachers in an unprecedented degree out of proportion to demand, an unusual opportunity exists for raising the standards of qualifications required for teaching positions. In short this is "a propitious time to give consideration to all measures that promise economy without loss of efficiency."

Those who declare that things must go on as they are or else the child will suffer, whether they consciously do so or not, are in reality defending vested educational interests. Take for example the teaching of laboratory science in high school. Any science instruction as it is ordinarily done is expensive because of space, equipment, and materials needed. Yet, a few years ago, a carefully administered experiment in the results obtained gave strong indication that teaching chemistry by demonstration by the teacher actually produces results superior to individual experimentation by pupils.

Another procedure when standards have been arbitrarily determined is the size of classes. Why thirty as a maximum? It is certain that there are other factors, such as homogeneity in ability which affect pupil achievement more than the figure 30.

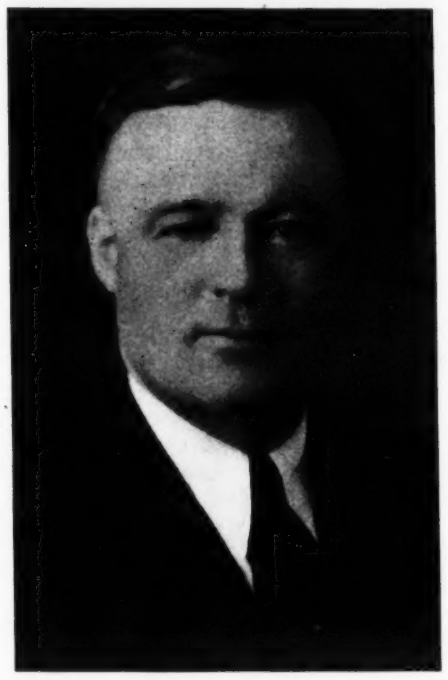
I might mention other similar items, but let us look specifically at the curricula.

The history of the elementary-school curriculum in California is extremely illuminating. Beginning with 1851, laws were passed by the state legislature making it compulsory to teach certain subjects in the common schools of that state. "The climax in total prescriptions was reached in 1923 when the number reached a total of 32."[7] Although this was "a much longer list than that of any other state," "the legislation in California was, however, unique only in quantity. Every item in the several laws could be found in the law of some other state."[8]

[6]For more extended statement, see, Kent, R. A., "How Far is the School a Part of the Social Fabric?" *The Elementary School*, XXXII, No 10 (June, 1932), pp. 760–65.

[7]Bagley and Kyte, *The California Curriculum Study*, p. 16.

[8]*Ibid.*



DR. LEONARD J. NUTTALL, JR.,
Superintendent of Schools,
Salt Lake City, Utah

Dr. Leonard J. Nuttall, Jr., newly elected superintendent of schools at Salt Lake City, Utah, was formerly professor of education and director of the training school of the University of Utah. He succeeds the late George N. Child and will complete the unexpired term ending in June, 1934.

Dr. Nuttall, who is 45 years of age, is a native of Salt Lake City, having been educated in the Brigham Young University High School and Normal School. After graduating from the Normal School, he entered Brigham Young University, later attending Columbia University, from which he was graduated with the degree of bachelor of science in 1911. In 1912 he was given the degree of master of arts.

Dr. Nuttall was an instructor and principal during the period from 1906 to 1916. In 1916 he became superintendent of the Iron county school district, and in 1919 was placed in charge of the Nebo district. From 1922 to 1930 he was dean of the College of Education of Brigham Young University. In 1930 he resigned to become professor of education and director of the training school at the University of Utah.

Two other facts stand out in bold relief in this connection. Studies made in that state show "strong evidence that some of the subjects that have been legislated into the curriculum through the pressure of minority organizations would have met a different fate had they been submitted to a popular referendum. There is clear evidence that the people as a whole are not in sympathy with having the public schools used for propagandist purposes."[9]

The other fact is that a national study of legislation shows "that eight or more states had not listed in their requirements arithmetic, reading, spelling, writing, language, and geography."[10]

A current text on public-school organization and administration shows the growth in the elementary-school curriculum of New Haven, Connecticut, between 1900 and 1925 as illustrative of the country as a whole. In 1900, 15 different subjects were taught in the elementary grades of that city. In 1925, all the subjects were taught in these schools that had been in 1900, and 21 different new ones had been added, making a total of 36.[11] The same authority informs us that curriculum extension of the elementary school has not been confined to the large cities. Is the increase in costs occasioned by specialists in instruction, in school-building construction and equipment, unquestionably justifiable? Although I raise the question with extreme reticence, that reticence would be only increased were I called upon to prove that the present situation is wholly defensible.

In the secondary field the situation in this respect was clearly set forth by Mr. Koos in an address which he gave at a conference on curriculum making, in October, 1931. Quoting data from Stout and Van Dyke, Koos presented a picture from 1906 to 1930. In the period 1906–1911 the total number of different courses offered in 35 high schools was 53. For 1915–1918 it was 72. "By 1929–1930 the number had amounted to the astonishing total of 306 courses!"[12]

"The *average* number of different courses in the same periods, were, respectively, 23.7, 28.3, and 48.1."[13]

These increases are reflected in the different subject groups. In the social-science studies in 1906–1911 there were 8 courses. By 1929–1930, 27 courses had been added.

In industrial arts by 1929–1930 there were added to two courses in 1906–1911, 34, besides general courses in applied science and mathematics.

In music no courses were reported until 1929–30 when 14 were listed besides "music" without designation.

As for subjects required, English is the only one, though most high schools require in addition American history and physical education. Algebra and geometry are required in less than half the schools.

With respect to the junior high school, Koos summarized the evidence by saying that "there is less evidence toward a well-articulated three-year offering than we are justified in anticipating in view of the argument of improved articulation mustered in support of junior-high-school reorganization."[14]

In our American public schools we have a penchant which amounts to a mania against dropping any subject once it has formally become a member of the ancient and honorable order of a curriculum. To get in is hard enough, as many members now in good standing can testify — but to get out? That is impossible. This is one place where even death seems to have no influence on the roll of membership!

We attempt to justify our curricular expansion on a psychological basis. Secondary schools have popularized education and therefore, we argue, we should democratize the subject-matter offerings. And facts concerning enrollment in high schools seem to give strong supporting evidence. Although the first public high school was not opened until 1821, and this school did not enroll more than 10 per cent of the children of high-school age by 1905, today it enrolls 30 per cent. Since 1900 this enrollment has increased *sevenfold*.

But I submit to you that to get children into school to expand the curriculum does not seem to be enough. It is true that juvenile delinquency did not seem to increase between 1904 and 1923. But in 1931, Mr. Wickersham stated that an overwhelming majority of the crimes committed in this country today are done by persons under 25 years of age. A few months ago the warden of Sing Sing expressed himself as alarmed at the youthful ages of persons committed to his institution.

The children and youth of America are probably the most schooled of any in the world or of any period in the history of civilization. Yet they seem to be also the most criminally inclined, at least among English-speaking races, and have their criminal acts treated most leniently.

* * *

And now with your permission, I will submit specific and what I trust may be, constructive suggestions.

In the first place, the public school is an integral part of our civilization and our social fabric. To take the isolationistic in its defense attitude will tend to bring it into sharp disfavor with its constituency, to weaken its influence as a social as well as an educative force, and in the

[9]*Ibid.*, p. 23.

[10]Bagley and Kyte, *The California Curriculum Study*, p. 48. Quoted from *Research Bulletin of National Education Association*, Vol. I, No. 5, Table 1.

[11]Engelhardt, Fred., *Public School Organization and Administration*, p. 312.

[12]*Curriculum Making in Current Practice*, p. 117.

[13]*Ibid.*

[14]*Ibid.*, p. 123.

(Concluded on Page 74)

The Relationship of the School Board to the Teachers and the Public*

Mrs. Joseph Scattergood, President, Pennsylvania State School Directors' Association, West Chester, Pennsylvania

The critical problems of the schools require for their solution the heartiest coöperation of the professional educator and the public. No less important in the solution of these problems is the service of the school board, elected by the people to represent them in the conduct of the schools. You have heard these little lines, written by an American, J. Mason Knox, in the darkest days of the world war:

It ain't the guns and armament, or the money they can pay.
It is the close coöperation that makes them win the day.
It ain't the individual, or the army, as a whole,
But everlastin' teamwork of every bloomin' soul.

The American school board originated and developed in response to a definite need. Back in colonial days, in the town meeting, every citizen took part in managing the school affairs. As the school systems became larger and more complex, this method became very impracticable. Even in the colonial period, temporary committees were often chosen to manage one item of business or another, e.g., to build a schoolhouse or to select and employ a teacher. As the amount of school business increased, the temporary committees were replaced by permanent committees or boards of education. These early boards were compelled to exercise complete control over the schools for there were no trained superintendents or supervisors.

The direct personal management of a school or school system is no longer the necessary or proper function of a school board. Teaching, supervision of teachers, and administration of schools have become specialized professions. The average citizen is no better qualified to take direct charge of a modern school system than he would be to take charge of a hospital or a bank. This does not mean that a man cannot be an efficient director of a hospital, unless he is a medical expert, or a bank director unless he is a banker, or a school director unless he is a trained educator. No board of directors is expected to assume direct control. The directors are chosen to find out the needs and possibilities and to outline plans and policies, to employ the best workers available, and to see that the desired results are obtained. They are not chosen to do things but to get them done.

The School Board and the Superintendent

The business contacts of school-board members with the teachers should be made through the board's chief executive officer, the superintendent of schools. This implies that the executive officer is thoroughly conversant with the ideas of the members of the board and of his teaching staff, in order that he may be able to express this relationship in a courteous and sympathetic way. It is most essential that a school board select with the greatest care, its executive officer, with full assurance that he or she is thoroughly prepared professionally, both in training and experience, for the position to be filled.

In any school system large enough to employ a superintendent, the official relationship between the school-board member and of the teachers and other employees should be indirect. The board has no direct relations with any employee other than the superintendent, except in matters of contract and payment of salary. The board member should not recommend applicants for nomination, except as a matter for his consideration, but in passing upon recommendations from the superintendent, I do think the taxpayers have a right to know the reason governing the decision of the board not to employ a local applicant when someone from home and someone living miles away are both applying for a teaching position. The superintendent has a right to demand for each unfilled position definite qualifications and experiences. The taxpayer has a right to inquire if there is discrimination against local people. In fact, he should naturally expect the board to give the local applicant the first consideration.

Some Desirable Contacts of Boards and Teachers

After the teacher is selected and elected there should be established mutual confidence between her and the school board. Unfortunately, the director's field of relationship usually widens. May I make a few suggestions to avoid this gap: See that there is printed a manual of duties, procedures, and understandings annually at the opening of school, and see that a copy is in the possession of each teacher. It should contain a list of teachers, officers, and members of the board so that the young teacher, and the older one also, may become acquainted with all with whom she may have to work. A calendar of the standard activities, the dates of opening and closing of school, and holidays to be observed is essential. It should include statements on the courses of study, pupil marking systems, and suggestive extracurricular services which teachers must share. This will avoid misunderstandings.

The board's fulfillment of its obligations regarding contracts, salary, allowances for absence on account of illness, and promptness in meeting payments of salaries help to establish the right confidence. Whenever it is possible for the members of a school board to become personally acquainted with the teachers of their districts, fewer misunderstandings occur. It is, however, realized that personal acquaintance is impossible, except in the small districts. An outdoor picnic supper at small cost, very simple in its character held soon after the opening of school and to which board members are invited, works most successfully in my own community. New teachers are introduced to every board member and are welcomed into the system. Acquaintance with the old teachers is renewed.

School directors should make the teacher feel our entire friendliness, and we should give her all the facilities she needs that we can afford. We should not permit ourselves to criticize her outside of the board meetings. Rather let us help her to do better than to replace her, if she is able and willing to improve.

Good Working Conditions and Tools

The one outstanding reason for the existence of a school board is the educational welfare of the children of the district. One of the greatest of board obligations to the children by way of the teacher is to furnish suitable working conditions. The lowest-priced papers, pencils, notebooks, maps, etc., are frequently the most expensive in the end. A mechanic requires good tools and good material, so does the teacher and the pupil. The selection of text and reference books and supplies and equipment for the various departments is becoming more highly specialized each year. Thoroughly successful teachers know the modern needs of their classes better than the school-board members.

Again, I repeat the best way to insure good teaching and efficient business management is to employ a capable superintendent and hold him responsible for getting results. The school-board member today mistakes his trust, unless he sees the fundamental purpose of his large responsibilities. His services will be meager indeed, if he considers it his duty to supervise the teachers, to boss the janitor, to discipline the pupils, and to buy chalk and erasers. Many of us have devoted a lifetime to the study of our jobs as school directors. We know something about it, but I do not believe there is any man or woman connected with public education that would admit he or she was really an expert, unless you defined an expert as "an ordinary man away from home on a job."

The Board and the Public

As we touch upon the second phase of my subject, the relationship of the board member to the public, I think it is necessary first, to know something of the relation of a board member to the board itself. This whole question is so linked with the same problems that I wish to make reference to what I regard lies at the heart of the school-board relationship. The school-board member who fails to see his relationship to the board as a whole is likely to act as though he were a free-acting official, forgetting that it is the board as a whole which acts in an official capacity.

The board member is entitled to hold personal opinions and he may properly express them outside of the board meetings. An opinion is one thing; a decision is another. The public has a right to know the board member's opinions about any issue; it has no right to know in advance what his decision is going to be; the board member himself should not know until he has all of the facts at his command. No promises should influence his final decision.

Relation of Individual Members to Board

The relation of the individual members to the entire board is somewhat like the relation of the tributaries to a river. A river is made up of its tributaries, but it is not identical with them. The Allegheny and the Monongahela and various other tributaries pour their waters into the Ohio, yet the Ohio is not merely the Allegheny, plus the Monongahela, plus all the other tributaries. It has its own channel, its own characteristics, and its own identity. Mr. George Smith, Mr. Thomas Jones, and Mrs. Mary Brown may be the members of the board. Each is an influence in the proportion to the strength of his leadership, each adapts his own ideas as he is influenced by others; consequently, board action is neither the judgment of Mr. Smith, Mr. Jones, or Mrs. Brown; it is a collective act representing the group as a whole. Mark this: It is quite conceivable that neither Mr. Smith, nor Mr. Jones, nor Mrs. Brown would like to indorse singly an action which represents them all collectively. Only the most exceptional cases where dishonest or corrupt practice on the part of a majority of the directors actually threatens the welfare of the district is a board member justified in resisting board action.

In discharging our duty to the public, it is well to remember that a board member is not elected in order that he may sell real estate, insurance, or any other commodity to employees of the board, or in order to increase the demand for his professional service. Neither is he elected in order that his children, or his neighbor's children, may enjoy special privileges. It is extremely unethical and, in most states illegal, for a board member to use his office in seeking special privileges or exemptions for his children or in soliciting business among his employees. The school-board member's relation to the public is implied by his relationship to the board as a whole. The board should be ready to hear a representative, to receive a petition or a resolution or hear an individual citizen, but a board mem-

*Abstract of a paper read before the Conference of Members of Boards of Education, Atlantic City, N. J., June 27, 1932.

ber should not. Directors should, however, respond to any legitimate movement on the part of the public, provided the matter is presented through the proper channels.

Keep Politics out of Schools

A school director may be a political office holder, but it is his duty to the teacher and to the public to keep politics out of the schools. We should not accept the office, unless we have time and willingness to serve and can attend and take part in board sessions. Let us attend to business rather than to pedagogy; avoid cliques and controversies so far as possible.

Parent-teacher associations should have the whole-hearted coöperation of school boards. Many misunderstandings between the public and school boards have been ironed out and settled through the medium of this organization. Then, too, teachers find great joy from the social contacts with the parents at their meetings and, through their various benefits, many things physical may be supplied, such as pictures for the classroom and added comforts for the teacher's restrooms. If they desire to charge a small admission for any parent-teacher entertainments from which the school will profit, in my opinion it should be granted. This organization is no longer regarded as meddlesome but helpful.

The criticism is sometimes expressed that school boards do not make sufficient attempts to acquaint the people of the community with school problems. The minutes of the board meeting should be open to the public and to newspaper reporters; official acts are recorded in them. However, school-board minutes do not often reflect the actual situation, with its problems and human sidelights. A bulletin issued periodically which outlines additional problems and requests helpful suggestions may be a great aid in bringing before the people the tasks confronting school boards. Such a bulletin provides an opportunity to outline some of the fine things the schools are doing, just as "school night" with classes in operation has proved a wonderful means of advertising the work of the schools and informing the public as no other method would.

Another valuable means of public contact between the schools and the people is the more generous use of school buildings by groups of citizens. Our buildings are the property of the taxpayers and most certainly should be used for community uplift. In fairness to the school district, consumption of electric light and janitorial services should be paid for by the organizations using the buildings.

In closing, fellow school-board members, may I remind you that the responsibilities of our office are large and the opportunity for service to childhood and the nation are unlimited. We have a wonderful responsibility to every teacher and employee in our system and to every voter and citizen in our community. We will ever try to be loyal to the voters who had confidence in us and to each other serving on the board, the superintendent, and to the teachers, for that finest thing called loyalty, will come only when the top of the house is loyal.

Some Advantages and Disadvantages of the Six-Year High School

L. R. Kilzer, Professor of Secondary Education, University of Wyoming

In a recent article in the JOURNAL, the writer listed the following characteristics of a six-year, undivided high school:

1. It incorporates grades seven to twelve, inclusive.
2. It has only one administrative staff.
a) If there is an assistant principal, he is responsible for his duties throughout these six grades.
3. Advisory officers, department heads, and classroom teachers are responsible for their assignments at all grade levels (seven to twelve).
4. Pupil-progress is from subject to subject and from grade to grade rather than from so-called lower to so-called upper division.

It was pointed out also that it is necessary to adapt buildings to the six-year high school organization. When all the pupils of grades seven to twelve, inclusive, are housed in the same building, it is wise to separate the pupils of the so-called lower division from the pupils of the so-called upper division to some extent by means of wings and floors of the building. If two or more buildings are used, these should be as near each other as possible, and should, when feasible, be connected by a closed corridor.

It is the purpose of the present article to point out some of the advantages and some of the disadvantages of this type of organization. Unfortunately it is not yet possible to cite trustworthy data to substantiate many of the purported advantages and disadvantages. In such cases theoretical discussions are, of course, in order.

The present article continues the important discussion of the six-year school begun in the October issue of the JOURNAL. A further paper in the December issue will outline further advantages and the disadvantages of the six-year school.—The Editor.

Some Advantages of the Six-Year High School

It promotes economy in administration. After several years of experience in a county where 19 six-year high schools are in operation, the superintendent of the Cuyahoga county schools at Cleveland, Ohio, recently said: "It seems impractical to discuss the junior high school as a separate organization for small communities. Experience indicates that a six-year high school, grades seven to twelve, inclusive, is more efficient educationally and more economical financially, until the enrollment in the six-year high school reaches at least 600. At this point a division may sometimes be made profitably."[1]

In a recent questionnaire study, an attempt was made to ascertain which type of organization is better — the one which segregates the seventh, eighth, and ninth grades by themselves and the tenth, eleventh, and twelfth grades by themselves, or the one which consolidates all six of these grades in one undivided unit. Of this number, 38 (42.7 per cent) indicated that the six-year, undivided high school effected economy in the cost of school administration. The author did not give data to indicate the reactions of the remaining 51 authorities.[2]

Since the 6-6 type of organization requires only two administrative staffs, it has a clear-cut financial advantage over the 6-3-3 and 6-2-4 types which require three administrative staffs. In times of economic depression and retrenchment, this advantage bears much weight.

It promotes economy in housing and equipment. In the six-year high school a single auditorium, gymnasium, swimming pool, cafeteria, library, orchestra or band room, teachers' restroom, nurse's room, and principal's office provide adequately for all needs. The rooms and equipment set aside for home economics, manual training, natural science, physical education, and social studies may be used with little or no inconvenience by pupils in all six grades.

In a recent study, 38 (42.7 per cent) of 89 authorities in secondary-school systems mentioned economy in buildings and equipment as one of the advantages of the six-year high school.[3]

Another investigation shows that 22 (68.8 per cent) of 32 schools in communities ranging in population from 2,200 to 30,000 reported that the six-year organization reduced the maintenance cost per pupil; 7 (21.9%) said it did not reduce this cost; and 3 (9.4%) were undecided.[4]

Better Teaching and Supervision

It promotes economy and efficiency in supervision. The superintendent and the teachers of special subjects, as art, music, penmanship, and physical education in many school systems waste much time in going from one school to another. The six-year high school, as characterized in this article, must be in a single building or in buildings in close proximity to each other. This arrangement conserves time. The supervisor is better informed in regard to the work being done when he is at all times reasonably close to the various classrooms. Frequently he needs to devote only a minute or two in checking on a certain teacher. Sometimes the mere fact that he is near and that he may drop in at any time has a very wholesome influence upon certain teachers. Sometimes the supervisor should remain in a given room during the entire class period, but at other times he may make brief inspections of all the work being done under his direction. In the latter situation, the six-year high school saves time.

Better teachers are secured for grades seven and eight. Since the teachers in the six-year high school should be assigned in accordance with their fields of major and minor specialties in college, the same teachers sometimes teach in each of the grades in the six-year high school. Naturally this requires that teachers of grades seven and eight be better prepared than are the teachers usually assigned to teach those grades in the 8-4, 6-2-4, and 6-3-3 types of organization. A great many superior teachers prefer to teach in high school rather than in grades seven and eight in elementary schools, intermediate schools, or junior high schools. They object very little or not at all to devoting part of their time to grades seven and eight in a six-year high school. Progressive administrators in the latter type of organization insist that some of the strongest teachers devote a large part of their time to grades seven and eight. Heads of departments sometimes teach these two grades themselves. When they do not teach these grades personally, they are nevertheless in close touch with the work at all times. Thirty (33.7 per cent) of 89 authorities in secondary-school systems recently said that better teachers are securable for grades seven and eight in the six-year high school than for the same grades in other types of schools.[5]

In another recent investigation, 22 (68.8 per cent) of 32 schools reported that the six-year high school having one competent principal secures better teaching because the heads of departments are responsible for the work done; 6 (18.8 per cent) reported that no improvement

[1]Yawberg, A. G., "The Advantages and Disadvantages of the Junior High School in Small Urban Communities," *Official Report*, Department of Superintendence, 1929, pp. 219–20.

[2]Davis, Calvin O., "The Six-Year High School in the American Public-School System," *Official Report*, Department of Superintendence, 1929, pp. 215–16.

[3]*Ibid.*, p. 216.

[4]Sanberg, G. H., "The Advantages and Disadvantages of the Six-year High School in the Smaller Urban Community," *Official Report*, Department of Superintendence, 1929, pp. 218–19.

[5]Davis, Calvin O., *op. cit.*, pp. 215–16.

would result; and 4 (12.5 per cent) were undecided.[6]

It is easier to get efficient male teachers for grades seven and eight. The adolescent boy should come into contact with teachers of both sexes. Sometimes he respects physical valor more than he does culture and refinement. He is interested to see how adults of his own sex react to the everyday happenings of the schoolroom. In the 8-4 and 6-2-4 types of organization there is a paucity of male teachers in grades seven and eight. This is true to a somewhat lesser extent in the 6-3-3 type. The lower salary scale has been an important factor in limiting the number of men who teach in grades seven and eight. It is a bit more satisfying to most men to be able to say that they are teaching in high school rather than in grades seven and eight, or even in junior high school. Men who teach in a six-year high school should devote at least part of their time to grades seven and eight.

Advantageous Specialization in Teaching

Teachers may be assigned to fields in which they are best prepared to teach. In small high schools it is not at all uncommon to find a teacher who has six or more classes daily in four or more fields of instruction. This practice is due to poor administration and can be improved upon materially. In the small six-year high school it is possible to assign one teacher to all the English classes. This permits the teacher to have a full schedule in his major field. In social studies, it is probable that there will not always be six classes daily. The teacher who majored in social studies may be assigned to the four or five social-studies classes. He may, in addition, be in charge of study hall, or he may teach one or more classes in his minor field. In somewhat larger high schools where one teacher cannot teach all the classes in English and where one teacher cannot teach all the classes in social studies, it is usually wise to have all the work in these two fields of instruction placed in charge of three or four teachers none of whom would teach in other than his major or minor field. Unfortunately many six-year high schools are not taking advantage of their opportunity for providing specialization of instruction. Such failure is regarded the greatest unexploited opportunity of this type of organization.

Faculty spirit is better in the undivided high school. Teachers who work in a single unit of a school system are more inclined to consider themselves on the same professional plane than is the case when some belong to a lower and some to a higher unit in the same system. Clannishness is greatly reduced by the practice which assigns a teacher to work in both the lower and the upper halves of the same six-year unit.

It permits continuity in curriculum building. Teachers in the classroom, as well as professional experts, should, no doubt, have an important part in the building and the revision of the curriculum. In this undertaking it is well to proceed cautiously and to evaluate results frequently. Departmentalization of instruction in a six-year high school affords the teacher and the administrator a much-needed opportunity to measure the cumulative results of the curriculum as tentatively set up, and to adapt it on the basis of these findings before adopting it finally. The grade location for certain subject matter may be better determined in a six-year high school than in a three-year or a four-year high school.

It permits productive experimentation. Both the immediate and the delayed results of certain types of subject matter and methods of procedure should be measured. The longer a pupil group is under the direction of a single administrative unit the greater is the opportunity for the careful evaluation of content and methods. Strictly comparable groups are seldom obtained in either controlled or uncontrolled experimentation; therefore, it is often better to obtain results from a smaller number of individuals over a longer period of time. Much experimentation in high schools today is practically worthless because it extends over too brief a period of time to obtain valid results. The six-year high school is better fitted than any other type of high school to provide adequate time for the determination of the results of purposive experimentation.

[6]Sanberg, G. H., *op. cit.*, pp. 218–19.

Enriched Courses Possible

The six-year high school can provide a more varied program of studies without increasing the cost. Certain elective and exploratory courses may well be open to pupils in the several grades. The six-year high school increases the feasibility of this plan since only one daily schedule of recitations is involved, and since the number of pupils in such courses will probably be sufficiently large to justify the courses. When departmentalization of instruction is utilized, and it should be utilized in six-year high schools, the teachers find their daily preparation less burdensome. The work in their various classes is necessarily rather closely related, and much that is done to enrich one course during a certain year may be used also to enrich other courses during the same year. The following year other enrichments may be used in several of the classes. Since daily preparation is somewhat easier under these conditions, many teachers are willing to teach the maximum number of classes allowed by the accrediting agencies. This permits an enriched program of studies because all required subjects can be provided without taking up all of the time of the teachers on the staff. The additional time may well be used for enrichment of the various subjects and of the entire program of studies. Unfortunately, many six-year high schools do not take full advantage of the opportunity to broaden their curricular offerings. This is pointed out clearly by the fact that 50 unselected six-year high schools in Indiana were found to offer only 4 per cent more subjects, on the average, than 50 unselected four-year high schools (in the same state) employing exactly the same number of teachers, school by school.[7] Such comparisons are unfair to the six-year high school, however, since a certain number of teachers in the four-year high school are required to provide instruction for only four grades, whereas the same number of teachers in the six-year high school are required to provide for two additional grades. It is really surprising that any enrichment whatever is possible under such conditions.

In a study of 119 six-year, five-teacher high schools and 196 four-year, five-teacher high schools in Kentucky, little significant difference was found between the curriculum of the six-year high school and the curriculum of the four-year high school, but again the comparison is unfair to the six-year school because its five teachers are required to teach two grades more than are the five teachers in the four-year high schools.[8]

[7]Shannon, J. R., "An Unexploited Opportunity in the Six-Year High School," *School Review*, 36:745–56, December, 1928.

[8]Bear, Robert M., "How Distinctive Are Small Six-Year High Schools?" *School Review*, 40:372–80, May, 1932.

OUR DEFENSE

Never in history has a pageant of greater promise been presented than the assembling, begun last week, of the school children, the high-school pupils and college students of America for another year's tuition, chiefly at public expense. It is estimated that one person in every four is in the schools either as pupil or teacher. If all could be brought together in one body, they would make a line four deep across the continent from sea to sea —nearly thirty millions of them. They are our strongest and surest defense.

—New York Times.

It promotes articulation. The educational world is giving much attention to articulation within subjects, between subjects, between grades, and between units of the school system. The Department of Superintendence assigned its entire yearbooks of 1929 and 1931 to the subject of articulation.

Between grades eight and nine of the traditional 8-4 type of organization there has been little or no articulation. Subject matter, aims, and methods have been significantly different in these two grades. High-school teachers seldom understand adequately the produce of the elementary school, and teachers of the elementary school sometimes regard their unit of the school system as an end in itself. They frequently fail to inquire in regard to the preparation that will best fit their pupils for the satisfactory pursuance of high-school work.

Articulation and Holding Power

The 6-3-3 plan, with its worthy aims and purposes, has failed to meet the expectations of its advocates in the matter of articulation between units of the school system. Fritz found the gap which existed between grades eight and nine in the 8-4 schools has not been eliminated or bridged but has merely been postponed one year by the 6-3-3 type of organization. He refers to the term "gap" as the tendency for pupils to fail of promotion in large numbers in the first few semesters after they enter high school.[9] The 6-2-4 type of organization may be expected to offer difficulties similar to those of the 6-3-3 type because both of these create two gaps whereas the 8-4 and the 6-6 plans have a single gap.

Teachers and administrators in the departmentalized six-year high school are enabled to build the curriculum so that it will provide the greatest degree of correlation within each subject and between subjects; within grades and between grades; and within the so-called lower and upper divisions as well as between them. Teachers find it possible to supply sufficient drill to fasten facts and processes securely, but at the same time they are able to avoid the deadening effects of mere repetition and rehashing of subject matter. Transitions in subject matter and method may be made more gradually in the six-year high school due to the fact that adequate time is provided for a long view.

It increases the holding power. Pupils who complete the eighth grade in the 8-4 or 6-2-4 organizations and pupils who complete the ninth grade in the 6-3-3 organization are usually made to feel that they have actually completed a definite unit of the school system. Compulsory attendance laws do not usually require further school attendance, and consequently many of these pupils drop out of school. In the 8-4 plan, the break between units comes during the early adolescent period for many of the pupils. They are at an awkward stage, and often dislike to transfer from one unit to another. In the 6-2-4 type of organization, the first break comes between grades six and seven, and the second and much more serious break comes between grades eight and nine. In the 6-3-3 organization, the first break comes between grades six and seven, and the second break comes between grades nine and ten when many pupils are still in the early adolescent stage. The 6-6 organization has only one break. It comes between grades six and seven — before many of the pupils have reached the adolescent age. This break is, therefore, less serious than the single break in the 8-4 organization. It is also less serious than the later breaks in the 6-2-4 and the 6-3-3 plans.

Pupil Losses Reduced

After making allowance for duplication, it was recently estimated by the U. S. Office of

[9]Fritz, Ralph A., *An Evaluation of Two Special Purposes of the Junior High School: Economy of Time and Bridging the Gap*, University of Iowa Studies in Education, Vol. IV, No. 5, Iowa City, Iowa, November, 1927, 80 pp.

Education that out of an original 1,000 pupils entering the first grade for the first time, 974 reach grade six, 855 reach grade seven, 768 reach grade eight, 610 reach grade nine, 438 reach grade ten, 321 reach grade eleven, 268 reach grade twelve, and only 260 are finally graduated from high school.[10] These figures show that only 26 of the original 1,000 pupils do not reach grade six; 119 others drop out before entering grade seven; 87 others drop out before entering grade eight; 158 others drop out before entering grade nine; 172 others drop out before entering grade ten; 117 others drop out before entering grade eleven; 53 others drop out before entering grade twelve; and only 8 of the 268 who enter grade twelve fail to graduate. Further examination of these data indicates that 119 pupils drop out between the time they enter grade six and the time they would enter grade seven; 87 drop out between entrance to grades seven and eight; 158 drop out between entrance to grades eight and nine; 172 drop out between entrance to grades nine and ten; 117 drop out between entrance to grades ten and eleven; 53 drop out between entrance to grades eleven and twelve; and only 6 drop out during the senior year. It is interesting to note that the greatest losses occur between grades six and seven, eight and nine, and nine and ten. The six-year high school will, no doubt, serve to reduce very materially the losses between grades eight and nine and between grades nine and ten.

Graduation exercises at the end of each unit of the school system tend to give pupils and parents a feeling of having reached a definite goal. Out of this point of view grows the tendency for many pupils to drop out of school as soon as compulsory attendance laws will permit. The 6-2-4 and the 8-4 organizations often hold graduation exercises for the pupils who have completed the work of the eighth grade. The 6-3-3 organization sometimes has graduation exercises at the end of the ninth grade. The 6-6 organization is quite free from such a situation because pupils are considered a bit too young for graduation exercises after having completed only the six grades of the elementary school. No other definite break occurs until graduation in the 6-6 system. Promotion exercises for the pupils who have completed the sixth grade in a 6-6 system may well be used. The idea of continuing rather than the idea of having finished should be emphasized in such exercises.

Interest and Support Increased

It is an aid to extracurricular activities. The six-year high school enrolls a greater number of pupils than either a three-year or a four-year high school would enroll in the same community. With the increased enrollment comes greater interest and support for extracurricular activities. Pupils in grades seven and eight of the six-year high school may be made to feel that they are definitely a part of the high school. Their parents, their relatives, and their friends are more interested in the high school as a whole than they are when these children attend an elementary school, an intermediate school, or a junior high school. The school paper, the annual, the handbook, the magazine, the clubs, plays, band, orchestra, and athletics are given greater support and can often draw upon a greater range and quantity of talent than they can in a local high school embracing fewer grades. School spirit is better when pupils remain a longer time in the same high school, and school activities profit greatly from good school spirit.

It permits greater economy in exploratory courses. Pupils in grades seven, eight, and nine should pursue work which is to a large extent exploratory, and pupils in grades ten, eleven, and twelve should pursue work of a somewhat more specialized nature. It should be kept in mind, however, that pupils in grades seven, eight, and nine are quite immature, and that choices of life's work made as late as the senior year are often transitory. Sometimes it is well to permit pupils from the upper grades in the six-year high school to join exploratory classes. This practice increases the number of pupils in such courses, and with increased numbers often come greater interest and a smaller per-pupil cost for the course. By having the same pupil for six years the school is able to make a better tie-up of exploratory courses with work later pursued than when the pupil leaves one school unit to join another.

It affords greater opportunity for guidance. Personal, educational, and vocational guidance can be given more effectively in a period of six years than in a period of two, three, or four years. Too often the school is unprepared to guide a pupil intelligently until he is about to complete the work of that unit of the school system. The pupil who is in the same high school for a period of six years is better known and better understood by his teachers and by administrative officers than is the pupil who spends less time with the same staff of teachers. His personal needs are cared for better; his courses are selected and taught to fit his needs; and he is given valuable assistance in preparing for life's work. Prognosis, diagnosis, and careful observations made and recorded by teachers and administrators become more potent in guidance when a longer period is provided for their gathering, interpretation, and application.

In a recent study it was found that 21 (63.6 per cent) of 33 high schools reported that a six-year high school having one competent principal can do more effective work in guidance; 9 (27.3 per cent) reported that the six-year high school cannot give more effective guidance; and 3 (9.1 per cent) were undecided in this respect.[11]

[10] U. S. Office of Education, Bulletin No. 3, 1930. *Statistical Summary of Education*, 1927–1928, p. 12.

[11] Sanberg, G. H., *op. cit.*, pp. 218–19.

THE PASSING OF SUPERINTENDENT BEVERIDGE

Mr. John H. Beveridge, superintendent of schools at Omaha, Nebr., for the past 15 years, died at his home in that city on October 12, following a brief illness of bronchial pneumonia.

Mr. Beveridge, who was elected in June, 1917, to succeed E. U. Graff, was a native of Ohio, and received his professional education in Ohio University. He began his teaching career in the rural schools of Iowa, and from 1897 to 1902 was principal in Glidden. He went to Missouri Valley in 1902, and in 1908 was elected superintendent at Council Bluffs. In June, 1917, he resigned to accept the superintendency at Omaha. Mr. Beveridge was awarded a Master's Degree by Columbia University following the completion of a graduate course in school administration. He was nationally recognized for his vigorous views on school administration and supervision, and was an active leader in the Department of Superintendence and other professional organizations.

Adjusting Progress Rates

It provides for better adaptation to the rate of progress in schoolwork. Neither the two-year unit, the three-year unit, nor the four-year unit provides adequate flexibility to fit the variation in the scholastic progress of the individual child. Bright, earnest pupils who work rapidly and efficiently should be permitted to take some courses ahead of their regular grade. In the 6-2-4 and 8-4 plans the pupils in grade eight cannot take certain desired courses in grade nine without considerable inconvenience to themselves and to their teachers. Time is wasted in going from one unit of the school system to the other; methods used in the two units often vary considerably; and schedule difficulties present themselves. Pupils in grade nine of the 6-3-3 organization find similar difficulties when they wish to take a course with the senior high school. In the 6-6 organization only the pupils in grade six are thus handicapped, while the pupils in the 6-2-4 and 6-3-3 organizations face this difficulty twice.

Dull pupils find the six-year high school as well adapted to their need as do the bright pupils. The former may, with very little inconvenience, repeat one or more courses in the same unit of the school system, unless they happen to be primarily in grade seven. When the irregular pupil takes all his work in the same unit of the school system, preënrollment in which the pupil indicates the courses he wishes to pursue the following year often makes it possible for the principal to build his daily schedule of recitations so that both the dull and the bright pupils may be provided for adequately. Seven years to complete six years of schoolwork is not considered nearly so serious a retardation as is three years to complete a two-year unit, four years to complete a three-year unit, or five years to complete a four-year unit. Subject promotion is facilitated by the six-year high school.

It permits longer continuity in certain subjects. To the extent that the six-year high school takes advantage of its opportunity for specialization of instruction and thereby offers an enriched program of studies, it makes for longer continuity in certain subjects. Public speaking or economics, for example, may be offered in addition to the more common courses because teachers find it easier to make their daily preparation in the fields of their specialization than in several different fields, some of which have been little studied. Continuity in courses is also effected when certain objectives are developed further and further from course to course and from year to year throughout all or nearly all of the six years of the secondary-school unit.

Individual Differences Aided

Some problems of adolescence are better provided for. Girls reach the adolescent stage between the ages of 11 and 15 with the mode falling within the thirteenth year; boys reach this stage about a year later, most commonly between the ages of 12 and 16 with the mode falling within the fourteenth year. Adolescence may begin as early as age 9 and as late as age 16 or 17. It takes several years for the individual to pass completely through this stage. If a child enters grade one at age 6 and makes normal progress in his schoolwork, he will enter grade seven at the age of twelve, grade nine at the age of 14, and grade ten at the age of 15. In the 8-4 type of organization he would therefore change from one unit of the system to another at the age of 14 — an age at which he or she is almost certain to have entered the adolescent stage. In the 6-2-4 and 6-3-3 types of organization the pupil is compelled to make two changes in school units, and both of these changes may come during adolescence. The 6-6 type of organization requires that the child make only *one* change of

(Concluded on Page 76)

An Attempt at Ability Grouping in a Small School

O. E. Harrington, Augusta, Michigan

The W. K. Kellogg Consolidated School, in which the work described in this article is carried on, is located in Ross Township, Kalamazoo County, Michigan. There are approximately 140 pupils in the elementary grades, with two teachers giving full time and a third part time to the kindergarten and first and second grades, and two teachers devoting time to the third to sixth grades, inclusive.

Prior to February 1, 1932, the work in the school system, so far as grading, grouping, and pupil progress were concerned, had been more or less of the traditional type. That is, if a child entered during his fifth year, he was placed in the kindergarten for a year. If at the end of that time he showed proper social adjustments, he was placed in the first grade at the beginning of the next year, and so on, through the system. To be sure, if a boy or girl were particularly weak in one or more divisions of his work, special attention was given him in the hope that he might be accelerated to permit him to go a grade higher at the proper chronological point in his school life. Much supplementary and enriching material had been in use at all times, but the weakness of the situation was in the fact that this material, as well as the more formal textual material, was not more carefully selected and administered on the basis of the ability of the individual pupils to use it. We were at all times concerned with the fact that there were always pupils in the various classes who were unable to more than just barely keep within range of the type of work required of them, giving only casual heed to the fact that they were asked to do a type of work outside their general range of ability.

On the other hand, we were also constantly confronted with the fact that we had pupils in these same groups who seemed to be quite inadequate to the general level of achievement set up for them and who were not working up to the limit of their achievement capacities. A more complete study of the situation and a review of the opinions of some of those who had done research work in these lines, as well as the results of achievement tests helped to substantiate our beliefs. Greene and Freden[1] found in their investigations, that there is a greater amount of relative retardation among those of a lower chronological age but advanced mental age, than among those chronologically overaged. That is, there is great danger of finding retardation at both limits of the capacity curve in our heterogeneous group. In the case of both these extremes, unless they are sorted out by approved testing methods and special attention given them, their progress in school will be unsatisfactory.

In this division we have some pupils of only kindergarten ability and others a very little more advanced and they are grouped and given work accordingly.

Placing the Pupils in Ability Groups

We felt that a more satisfactory method of handling the situation would be to group the pupils into ability groups in each of the subjects, eventually, on the basis of teacher judgment, standardized achievement tests, mental tests, chronological age, and social adjustments. Our final method of procedure was determined after a study of some of the research in this field and a number of helpful conferences with Prof. Homer J. L. Carter, associate director of research, Western State Teachers' College of Kalamazoo, who helped outline our procedure.

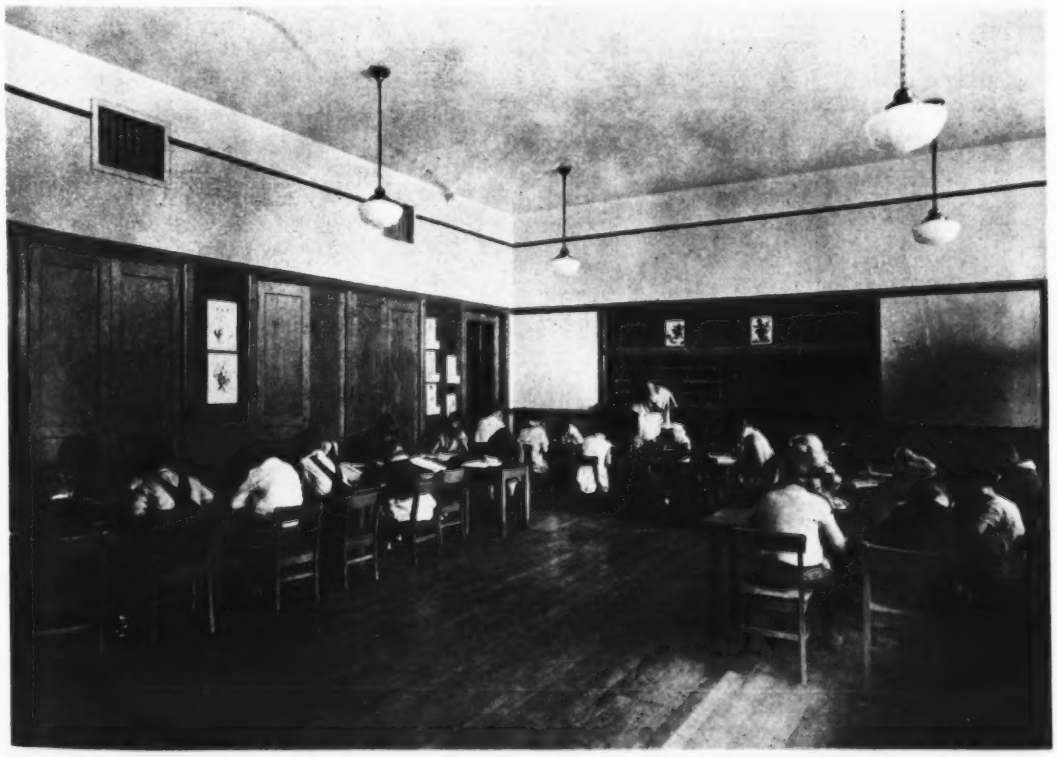
Our decision to use a composite method of pupil placement was partly based upon a study of such research reports as that by Hall[2] in which he strongly recommends such a method, partly upon the experience and research of Professor Carter, and finally upon the judgment of the teachers of the pupils concerned. It is conceded that, without the intelligent and enthusiastic interest of each of the elementary teachers concerned, a program of the sort discussed in this paper would be impossible. As our pupils had nearly all had a mental test, we proceeded at once with the achievement testing.

It was thought wise to begin the work in only one subject, and the selection was reading. Accordingly, we administered the Gates Primary Reading Test to the early elementary pupils, and the Sangren-Woody Reading Test to the later elementary pupils. Having completed the tests and the raw scores reduced to derived scores, we were ready for a study of the results and for a grouping of the pupils. The grade-ages of the pupils were found to vary as much as five years among pupils reading in the same grade, as a study of Graph I will show. The dotted line on the graph traces the variation in grade-ages as derived from the total reading scores made in the test the first week in February. The scores which are those of fifth-grade pupils, show a variation in reading ability, ranging from the first month of the third grade by pupil 9, to the fifth month of the eighth grade by pupil 15. Undoubtedly, the criticism will be made that such a combination of pupils must have been carelessly made in the first place, but pupil 9 and pupil 15 are the same age within one month and are doing comparable work in some of the other subjects, especially arithmetic and spelling, and fall together naturally on the basis of social adjustment.

One interesting point brought out by the result is the great difference of subject-age in some particular phase of the subject, with only very little or no such differences in other phases. This is illustrated by the scores indicated in Graph II. Robert is as low as grade two in read-

[1]Greene, H. A., and Freden, G., "Failures and Double Promotion in the Elementary School," *Journal of Educational Research*, XVII (April, 1928), pp. 262–72.

[2]Hall, John J., "How does Your School Rate in Providing for Gifted Children?" *Journal of Educational Research*, XXII (September, 1930), pp. 81–88.



Three groups of pupils of first and second grade level grouped according to special reading abilities.

ing rate, and Earl is as high as grade nine in reading rate, yet Robert is very nearly the equal of Earl in word-meaning and central-thought detection. This means that the grouping of pupils following the testing program must be flexible. The pupil must be transferred from one group to another at various and irregular intervals as his demonstrated ability and needs seem to warrant.

To make these groups fairly and intelligently, it was necessary to forget grade lines. Some second-grade pupils were grouped with pupils from the third and fourth grades for some particular reading objectives as "total meaning" or "ability to follow directions." Within the four months' period of the program the pupils have been shifted several times from one group to another. It was thought advisable to organize one group of superior pupils into a free-reading group, requiring less special attention than the less advanced groups.

Importance of Properly Referring to the Group

At the outset we adopted the policy of referring to these groups in some way other than slow, fast, and normal. Some answers to a questionnaire sent out by Goodrich[3] advises strongly against the tendency which we are sure to find on the part of the teachers to refer to them in some such manner. It is partly this poorly advised method of naming the groups that gives rise to a feeling of inferiority on the part of one group, and of superiority on the part of another. Care must be taken on the part of all concerned to refer to the groups in terms of the objective before them, thus leading the pupils to finally think of themselves as in a certain group for a specific purpose, and not because of either inferiority or superiority, and that their place is only temporary. This fear of developing in the boys and girls such a complex of one sort or the other seems to be one of the outstanding objections of those who oppose or question ability grouping.

Type of Material to Be Used for the Group

Having grouped the pupils into three groups in each of the elementary rooms, the next problem of importance was the selection of the proper materials for each of the several groups. Next to the proper grouping, the proper selection of differentiated material is a matter of greatest importance. Without such enriching and carefully adapted materials the whole scheme is more than likely to prove a disappointment.

This is a group of fifth and sixth grade pupils among whom we have a number who are able to do reading work of the level of high-school pupils; therefore they are allowed to choose under the guidance of the teacher a wide variety of books and magazines from the library.

The material used consisted of a great deal of reading matter already at hand, such as health booklets and pamphlets, of varying degrees of difficulty which we had in our health department. These consisted of travel booklets and folders which the pupils and teachers obtained from time to time, and material of like nature, as well as textbooks in other subjects, such as history, geography, and hygiene. This was properly sorted and passed out to the respective groups. Next, several sets of reading books of various types were purchased, some for their literary value, and some for their particular value in working for total meaning, as well as some for following directions. We purchased these books in rather small numbers, not more than twelve of a kind, in order that we might purchase a richer supply of material with a given amount of money. Of course, we made use of our library more than ever before, as well as making use of the city library in Kalamazoo for pupils placed in the free-choice group.

Program Adjustments Necessary

The daily program of work then had to be slightly readjusted to meet the new arrangement of work because all of the three groups worked on their reading at the same time. One hour is devoted to the work in each of the rooms. With certain of the groups workbooks are in use and with others the teacher goes from pupil to pupil and works with them individually. With others, the work of the teacher is done with the groups as a whole.

It is well to note again at this point that the groups are absolutely flexible. A child might be working with fifth- and sixth-grade pupils at one time, and at another with fourth-grade ones. We try to keep constantly before them the objectives toward which they are working and not the grade in which they are doing it. In this case, the teacher must constantly study individual cases and give occasional tests to better check the progress which is being made.

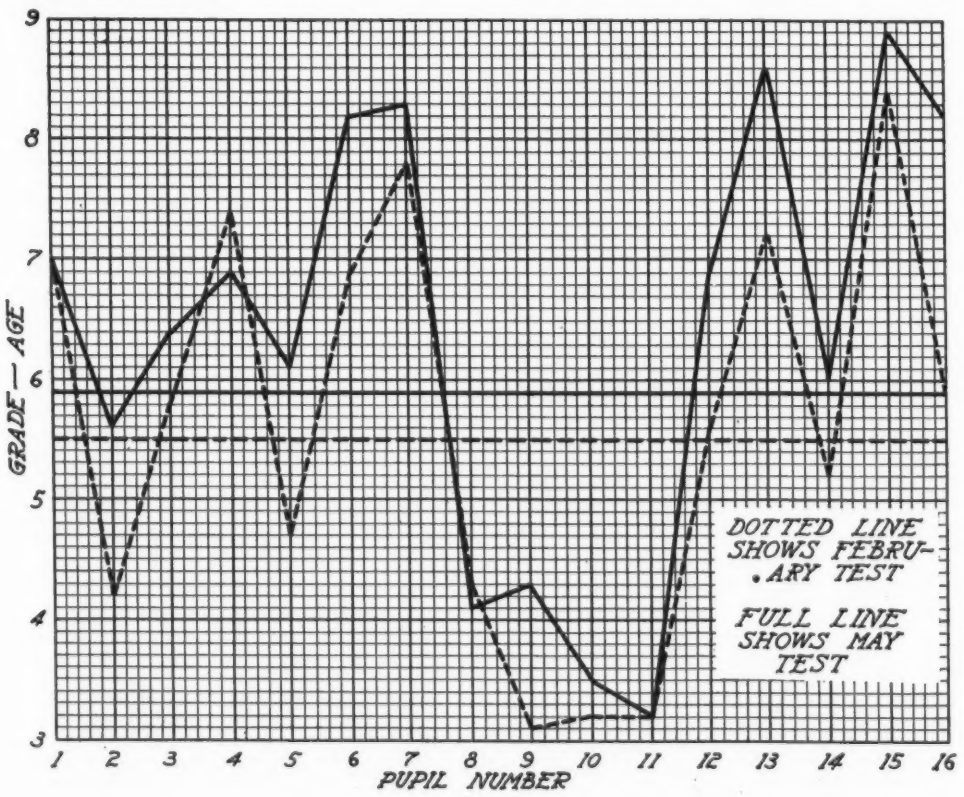
Plans for the Continuation of the Work

Inasmuch as the work is fairly well established and under way in reading, we plan to give the elementary pupils diagnostic tests in arithmetic soon after the opening of school in September, proceeding as we have in the reading work. We are confident from our results in general achievement tests previously given the pupils, that they will not be grouped the same in arithmetic as in reading. When we proceed to the grouping in spelling, there will be still another combination of pupils. With this situation in mind, we have felt it wise to forestall possible protests of parents about their children being demoted or promoted. We do this by designating our rooms by letter, instead of the number, of the grade previously used, and the groups within the rooms are numbered I, II, and III. Thus, a child may be found doing arithmetic with group C III, and reading with group D I.

To be sure, we shall probably be able to designate accurately for some time to come, the grades in which the child can be said to belong. Yet, we are looking forward to a school situa-

[3]Goodrich, T. V., "Influence of Homogeneous Grouping on Pupil Personality," *School Executives Magazine* (February, 1931), 269–70; 288–89.

GRAPH I. Distribution of Grade-Age Reading Abilities of 16 Pupils in the Fifth Grade for February, Dotted Line, and May, Solid Line Tests.



This is a group of fourth- and fifth-grade pupils who are carrying on silent reading at the regular level of their classes. The work is carried on in the basic readers for these classes under the direct guidance of the teacher.

tion in which the pupils are doing work at all times at the proper level of their ability, no higher and no lower. We further endeavor to keep the parents in touch with the general purpose and progress of this scheme of pupil grouping, by discussing the work at length in the school publication which is issued once each month. We consider this one of the essential factors in the success of this or any other plan of school improvement.

Reasonable Results Expected

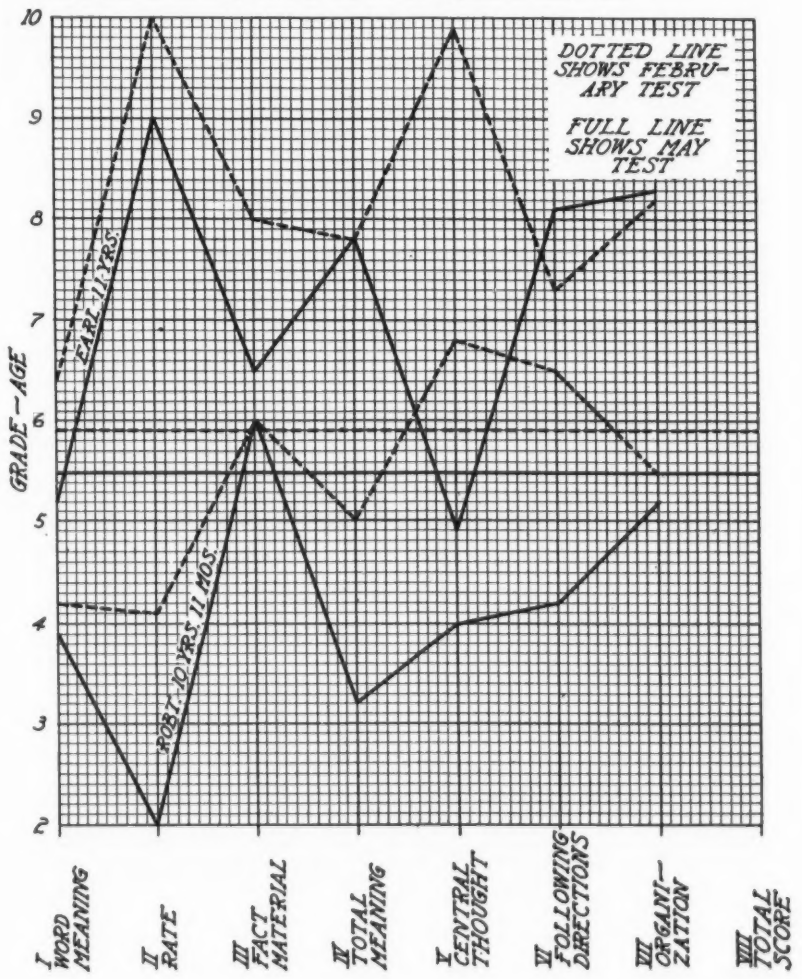
That we have reason to feel that we shall get reasonably satisfactory results from this procedure is evidenced not only by the data shown in Graphs I and II, but by the work of others reported from time to time in the past three or four years. The dotted line in Graph I shows the grade levels in February, and the solid line the grade levels in May. It will be noted that in nearly every case, the pupils have progressed satisfactorily in the four months intervening between the tests. In fact, the average progress made in the fifth grade was one year and one month. Of course, certain allowances should be made for the greater ease a group would handle a test after having taken a similar one.

In Graph II, the solid lines represent the January scores, and the dotted lines the May scores. It will be noted that these two boys made marked progress especially in those phases of the subject in which they were poorest. An interesting point brought out is the fact that the gap between the highest and lowest scores is greater in the May than in the February tests, which adds emphasis to the fact that ability grouping tends to give acceleration to the progress of the superior pupils.

Bowen and Latshaw[4] in their experiment in ability grouping in the Swan School, Bedford, Massachusetts, report that the failures were reduced from 20 per cent in 1928, to 5 per cent in 1929. Lincoln[5] reported rather an extensive experiment in determining through a series of years the performance of children admitted to school and classified in the first place on the basis of mental age. He found that they were in no way unfavorably affected by this plan of grouping and that they had continued to show marked progress, not only in academic achievement but in social adjustments as well.

In conclusion, it may be stated that it is not our plan ever to promote pupils academically into groups with whom they would be social misfits; rather, we expect to so enrich the curriculum that every boy and girl, so far as it is possible shall work to the upper limit of his mental ability in a happy and natural social environment.

GRAPH II. Distribution of Special Grade-Age Scores for Two Boys at Opposite Ends of the Ability Curve for February, Solid Line, and May, Dotted Line, Tests.



[4]Bowen, Alice D., and Latshaw, Harry F., "An Experiment in Ability Grouping in the Swan School," *School Executives Magazine* (September, 1930), 25–26; 43.

[5]Lincoln, Edward A., "The Later Performance of Under-Aged Children Admitted to School on the Basis of Mental Age," *Journal of Educational Research*, XIX (January, 1929), pp. 22–30.

TWO HOUSES

A recent editorial in a weekly paper calls attention to a problem in rural life that at present seems to defy solution. Writes the editor of the *Catholic Citizen* (Milwaukee):

On the hilly northwest corner of the crossroads, in the middle of a tiny playground, stands the dingy little brick schoolhouse, "a ragged beggar sunning," as Whittier would put it. Yet, a glimpse through the window discloses an interior made attractive and instructive by the artful hand and thoughtful mind of the teacher. A quarter of a mile down the road, on the same side, stands the former schoolhouse, a small frame building, once nursery of knowledge to the present-day adults of the countryside. It is now used as a pig-sty.

Diagonally across from the "new" school building, in the midst of spacious parking grounds, stands a well-kept structure. It is a roadhouse dance hall costing several times the price of its neighbor across the corner.

The school pays lifelong dividends to all of its little patrons, in the shape of mental acumen and as much moral strength as it can impart to them. Its manager is a young man or woman of wholesome ideals, and with the best interests of the community at heart. Yet, an effort is being made to reduce the niggardly support it receives by cutting the teacher's salary and shortening the school term.

The roadhouse across the way pays large dividends to two individuals — its proprietor and Satan. The owner of this hall of seductive pleasure would be more honorable if he met his young victims on the highway and, at the point of a gun, took their money away from them. His present industry deprives them of their money, and also of their health, and of the morality their homes and churches and the little school across the way have painstakingly given to them. But this manager's income will not be reduced, nor will his term be shortened.

What a shameful blemish this contrast will leave upon our civilization! How a better generation will sneer at us for allowing the fruits of the one corner to be blasted by those of its neighbor!

DEPARTMENT OF SUPERINTENDENCE TO MEET AT MINNEAPOLIS

The next annual meeting of the Department of Superintendence of the N.E.A., will be held February 25 to March 2, at Minneapolis.

Pres. Milton C. Potter has announced that plans for the program are progressing and that a fine group of speakers has been arranged for the meeting in Minneapolis. Supt. C. R. Reed and associates of Minneapolis are in charge of the arrangements for the entertainment of the visiting members.

The headquarters for the meeting will be in the Minneapolis auditorium, one of the finest in the country and conveniently located to the downtown section.

A number of hotels in the city are available to the visiting members. Requests for accommodations may be addressed to Mr. C. H. Chadbourn, Chairman Hotel Committee, Vendome Hotel, Minneapolis, Minn.

Relative Salaries for Different School Positions

Walter Crosby Eells, Professor of Education, Stanford University

What should be the relative salaries for different types of positions in the school service? The superintendent of schools, of course, should receive more than the classroom teacher. But, how much more? A principal should receive more than a janitor. But, how much more? There is no final and definite answer to these questions, but considerable light can be thrown upon them by considering the relative salaries for different positions actually found in various groups of cities. Common practice throughout the country is the best guide we have at the present time. In Table I the median salary is given for various school positions in cities whose population is between 30,000 and 100,000. The first column is based upon 204 cities in all parts of the United States; the second upon eleven California cities; the third is for the city of Fresno.[1]

TABLE I. Median Salaries for School Positions in Cities of 30,000 to 100,000 Population, 1930–31

	United States	*California*	*Fresno*
Administrators			
Superintendent	$6,758	$7,200	$6,500
Assist. supt.	4,583	5,640	4,500
Principals			
Senior high	4,281	4,500	4,100
Junior high	3,353	3,850	3,400
Elementary	2,646	3,067	3,017
Supervisors			
Art and music.....	2,544	2,900	2,820
Teachers			
Senior high	2,111	2,660	2,516
Junior high	1,860	2,405	2,097
Elementary	1,609	1,954	1,936
Kindergarten	1,609	1,900	1,850
Others			
Nurses	1,651	1,600	1,850
Janitors	1,444	1,600	1,350

Comparisons of relative salaries for the different groups will be much easier if they are reduced to comparable units. For this purpose we shall take the salary of elementary-school teachers as 100 and express all other salaries in each column in Table I in terms of this base. Elementary-school teachers form decidedly the largest class of school employees in the system and their salaries are probably the most stable. Results on this basis are given in Table II.

TABLE II. Relative Salaries for School Positions in Cities of 30,000 to 100,000 Population, 1930–31 (Elementary Teachers = 100)

	United States	*California*	*Fresno*
Administrators			
Superintendent	420	368	336
Assist. supt.	285	289	232
Principals			
Senior high	266	230	212
Junior high	208	197	176
Elementary	164	157	156
Supervisors			
Art and music	158	148	146
Teachers			
Senior high	131	136	130
Junior high	116	123	108
Elementary	*100*	*100*	*100*
Kindergarten	100	97	96
Others			
Nurses	103	82	96
Janitors	90	82	70

The relations given in Table II may be shown more clearly if exhibited in graphic form. This is done in Figure 1.

From Table II it appears, for example, that throughout the country the average superintendent in cities of 30,000 to 100,000 population is paid four and one-fifth times as much per year as the average elementary teacher; in California he receives three and two-thirds times as much; in Fresno three and one-third times as much. Similar comparisons may be made with the other positions listed. It is noticeable that there is the same order of increase in all three columns. The most striking variations of Fresno from the California figures come in the case of administrators, senior- and junior-high-school principals, junior-high-school teachers, and janitors. In all of these Fresno is relatively low. In the United States, for example, the average salary to janitors is nine tenths that of an elementary teacher; in California cities it is eight tenths; in Fresno it is seven tenths. Such variations from accepted practice and state and national experience should be taken into consideration in contemplated revisions of salary schedules.

Similar comparisons for any other city for which data are available can easily be made with the given group of California cities or with the practice in the country as a whole in cities of 30,000 to 100,000 population.

For cities larger or smaller than the group thus far discussed, similar information is given as to median salaries in Table III. The information in the first column is based upon reports from 88 cities of over 100,000 population; that in the second column from 204 cities of 30,000

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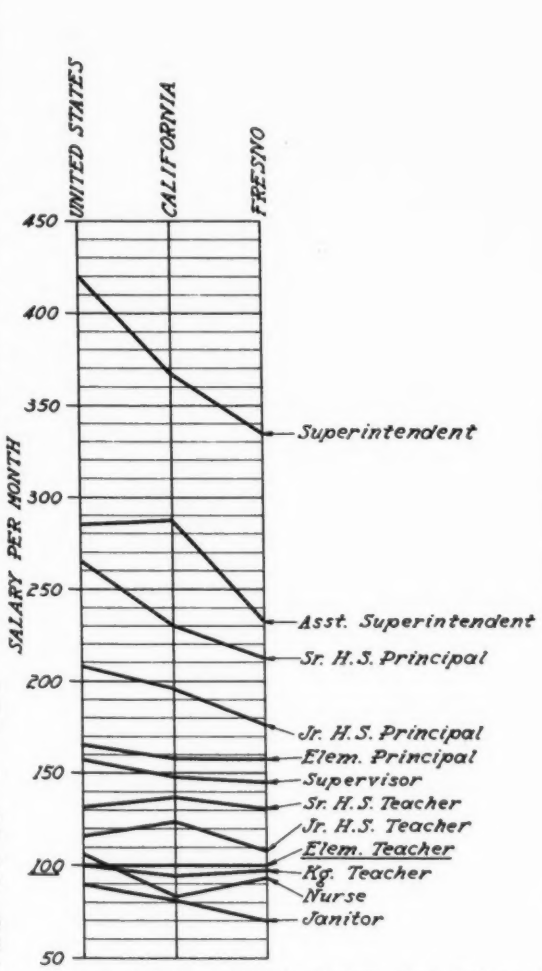

FIG. I. Relative Salaries for Various School Positions in cities of 30,000 to 100,000 population, 1930 to 1931.

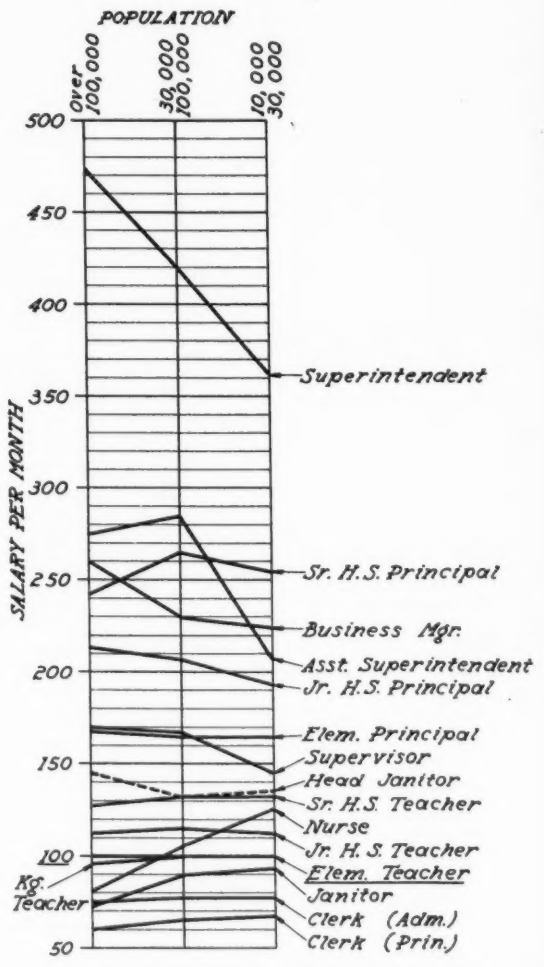

FIG. II. Relative Salaries for Various School Positions in cities of 10,000 to 30,000 population, 30,000 to 100,000 population, and over 100,000 population in the United States, 1930 to 1931.

TABLE III. Median Salaries for School Positions in Three Groups of Cities in the United States, 1930–1931

	Large Over 100,000 (88)	*Medium 30,000–100,000 (204)*	*Small 10,000–30,000 (449)*
Administrators			
Superintendent	$10,000	$6,758	$5,149
Assistant superintendent	5,786	4,583	2,950
Business manager	5,500	3,690	3,200
Principals			
Senior high school	5,100	4,281	3,613
Junior high school	4,500	3,353	2,763
Elementary (supervising)	3,519	2,646	2,349
Supervisors			
Vocational	4,433	3,413	3,025
Health	4,120	2,520	1,875
Physical education	3,690	2,933	2,344
Manual training	3,567	3,050	2,365
Music	3,556	2,693	2,043
Primary grades	3,500	2,800	2,217
Art	3,383	2,395	1,875
Home economics	3,271	2,485	1,832
Penmanship	3,083	2,320	1,888
Teachers			
Senior high school	2,731	2,111	1,876
Junior high school	2,348	1,860	1,619
Elementary	*2,118*	*1,609*	*1,428*
Kindergarten	2,077	1,609	*1,428
Others			
Nurses	1,715	1,651	1,798
Clerks (adm. and sup. offices).....	1,581	1,268	1,113
Clerks (principals' offices)	1,281	1,046	966
Janitors, head	3,050	2,114	1,892
Janitors, other	1,541	1,444	1,347

*Kindergarten teachers are not reported separately from elementary teachers in cities of 10,000 to 30,000.

TABLE IV. Relative Salaries for School Positions in Three Groups of Cities in the United States, 1930–31

	Large Over 100,000	*Medium 30,000–100,000*	*Small 10,000–30,000*
Administrators			
Superintendent	472	420	361
Assistant superintendent	273	285	207
Business Manager	260	229	224
Principals			
Senior high school	241	266	253
Junior high school	212	208	193
Elementary (supervising)	166	164	164
Supervisors			
Vocational	209	212	212
Health	195	157	131
Physical education	174	182	164
Manual training	168	190	166
Music	168	167	143
Primary grades	165	174	155
Art	160	149	131
Home economics	154	154	128
Penmanship	146	144	132
Teachers			
Senior high school.....	129	131	131
Junior high school	111	116	113
Elementary	*100*	*100*	*100*
Kindergarten	98	100	*100
Others			
Nurses	81	103	126
Clerks (adm. and sup. offices)	75	79	78
Clerks (principals' office)	60	65	68
Janitors, head	144	131	132
Janitors, other	73	90	94

*Kindergarten teachers are not reported separately from elementary teachers in cities of 10,000 to 30,000.

[1]The salary data in this paper are taken from the *Research Bulletin of the National Education Association*, May, 1931, and from the *Special Salary Tabulations* of the Research Division of the National Education Association, May, and June, 1931. The information was originally assembled for use in an intensive study of salaries in the school system of Fresno, California. See Walter Crosby Eells, *Salary and Cost Study of Fresno Schools*, Fresno, California, May, 1932, 192 pp.

The Utilization of Elementary School Buildings

Stuart D. Fink, University of Minnesota

The size of the capital expenditures involved in the erection of the modern school plant has long since focused attention upon possible economies in the planning of these plants. Studies of the use actually being made of school buildings are an outgrowth of the movement. Data relating to the utilization of secondary-school plants have appeared from time to time over a period of hardly more than six or seven years but have not been extensive in amount. Morphet's study[1] is the classic in this field and the one really extensive treatment. During recent years many published building surveys have concerned themselves with the objective measurement of utilization.

This attention to the measurement of building use has, however, confined itself to the secondary-school plant. The interested administrator may, by the use of techniques already many times employed, measure the extent of use of his high-school plant or plants. Not only that, but he will have at his disposal data by which he may make comparisons with standards and with conditions obtaining in other cities.

This is not so in the case of an elementary-school building. True, the same general techniques may be employed. They may even be simplified. But there is available in literature no data setting forth the extent of utilization of any considerable number of elementary-school plants.

This lack of attention to the use of the elementary building is probably accounted for by reason of the fact that maladjustment of educational program to physical plant more readily occurs in the secondary school. The curriculum is broader, the program more complicated, and the building more intricate in its internal design. It has not necessarily been assumed that there is a dissimilar problem in connection with the elementary-school building; still this phase of the problem has been neglected. The assumption has probably been that the more acute problem lay with the high-school building. This may or may not have been true.

Recently there has been completed at Minneapolis an intensive study[2] of the use of all of the regular elementary-school buildings, 89 in number. In view of the relatively large number of buildings concerned, it was thought that some of the more significant findings might be of more than localized interest.

Measures of Utilization

Let it be granted, then, that objective measures of building usage are desirable, if not essential, in efficient school-plant management. These measures also serve as standards that may be used in the construction of new buildings. The common units of measurement are two — room utilization and pupil-station utilization.

The former is concerned not with the number of pupils in the room but only with whether or not pupils are present. Pupil-station utilization, on the other hand, is a percentage representation of the ratio between the number of pupil-stations in use and the number available. Ideally, the expression "number available" would mean not the actual number of stations with which the room is equipped but the maximum equipment possible, in conformity, of course, with recognized standards. A pupil-station is defined by Morphet[3] as "any seat, machine, space at a table, or proportion of space on a floor (for example, the gymnasium) to which a pupil may be assigned for any period or part of a period."

It is possible to apply these units — percentage of room or pupil-station utilization — separately, or they may be used together. Separate application, however, paints but half the picture, and can never be satisfactory except for supplying a hasty overview. Rooms may be used 90 per cent of the time and yet be half filled. On the other hand, pupil-stations may be 90 per cent occupied and rooms unequipped with stations may lie idle. The two measures are mutually complementary. Each reveals nonutilization in a way that the other does not.

In the analysis of the Minneapolis situation these two measures have been employed. The percentages of utilization reported here, however, require some further clarification. The investigation was not concerned with building utilization at any except regular school hours. It included every regularly scheduled pupil activity taking place from the opening of school in the morning until dismissal in the afternoon. Before-school, after-school, evening, and week-end usage was ignored. Use of the buildings by adults, or others not enrolled, was treated in the same fashion, even though buildings were so used during school hours. Rooms used for such purposes are essentially vacant rooms, for they are available for regular school purposes if the need arises.

The general situation with respect to building use in Minneapolis is represented in Table I wherein the median percentage of room use by buildings is found to be 78, exactly 10 per cent higher than the median percentage of pupil-station use. These figures are derived from an analysis of the 77 permanent buildings in use, 12 small wooden "portables" or "temporaries" being excluded.

TABLE I. Distribution of 77 Permanent Buildings by Percentage of Room and Pupil-Station Utilization

Percentage of Utilization	*Number of Buildings*	
	Room Utilization	*Pupil-Station Utilization*
83–88	17	0
77–82	27	3
71–76	18	25
65–70	9	23
59–64	3	14
53–58	2	9
47–52	0	2
41–46	1	1
Total number of buildings	77	77
Percentage range	45–86	41–81
Median percentage	78	68

Methodology

Utilization percentages (Table I) were calculated by the use of a simplified form of Morphet's formula.[4] These figures, representing utilization of entire buildings, do not, in fact, do so. They are, in actuality, an average for each building of the percentages of use of only certain of the rooms in the building. In general, the figure represents an average of all full-sized instructional rooms except gymnasium-auditoriums. Also excluded are storerooms, administrative and health suites, locker-shower rooms, the heating-ventilating plant, and a few odd-shaped, undersized rooms.

How to Interpret these Figures

Now just how significant are these figures? Do they represent a normal or an unusual situation? Such questions are not easily answered. Comparable data from other cities are not available for elementary-school buildings. Comparisons must be made, if at all, with secondary schools. This may be misleading if not done with caution. Elementary- and secondary-school buildings are more or less incomparable from the very nature of their programs. Different methods used in making utilization studies must also be taken into account.

Engelhardt[5] has computed the utilization of rooms on the basis of the normal school day assigned to the particular grade occupying the room. Another method of computation might take as a basis the length of day assigned to the highest grade in a particular building. This disparity in bases would make comparison unfair. The use of Engelhardt's method would yield higher percentages. For the purposes of this study a third basis has been used. One object of the investigation was to make comparisons from building to building within the city. With that end in view it became necessary to find a common basis for such comparisons by setting up a length of school day that would be uniform for all buildings irrespective of grades housed. That school day was taken to be 315 minutes long, because that was the standard length of day in the city for the highest grades regularly included in the study — grades five through eight. Computations, then, were based on a 1575-minute school week. The utilization of each room in each building was determined by calculating the percentage of time the room was in actual pupil use each week, using the intended standard 1575-minute week.

Any subsequent attempts to compare measures of utilization in other situations with those presented here must take into account this basic unit, a 1575-minute school week.

Finally, it would seem that instances are not infrequent when local situations render a seemingly low percentage of use quite satisfactory. Consider, for example, a city having numerous, old, three-story buildings. If the present policy of the board of education prohibits the use of those third-floor rooms for instructional purposes, percentages of use for these buildings as a whole will be low. In terms of that local situation, however, the percentages may be quite satisfactory.

Engelhardt and Engelhardt[6] say tentatively that 68 to 80 per cent is representative of best practice and that below 60 per cent is not a reasonable degree of utilization. Now bearing in mind that the figures quoted by the Engelhardts relate primarily to the secondary-school situation, that they are tentative, and that methodology may vary, the Minneapolis situation appears in rather a favorable light. If 68 to 80 per cent is the range for best practice, then only 9 of the Minneapolis schools fall below in percentage of room use, though 39 fall below in pupil-station use. If 60 per cent is the lower limit for reasonable expectancy, then only 4 buildings fall below in percentage of room use and 13 in pupil-station use.

Utilization of Regular Classrooms

Utilization as evidenced by the building totals of Table I indicates simply what proportion of rooms or stations are likely to be in use at a given time. For example, if room use in a given building is found to be at 80 per cent, then we may expect about 1 room in 5 to be vacant in this building during the day. But building totals do not show what specific rooms, or types of rooms, are in use and what ones are vacant in such a building.

To show how the acceptance of this figure at its face value may conceal a basically unsound condition, consider this example. In an 80 building city we compute utilization by building totals and find that the median is 85 per cent.

[1] Morphet, E. L., *The Measurement and Interpretation of School Building Utilization*, Contributions to Education, No. 264, Teachers College, Columbia University, 1927.

[2] Fink, Stuart D., "The Utilization of the Elementary School Buildings in the City of Minneapolis." M. A. Thesis, University of Minnesota, 1930.

[3] Morphet, *op. cit.*, p. 5.

[4] Morphet, *op. cit.*, p. 21.

[5] Engelhardt, N. L., *School Building Programs in American Cities*, Bureau of Publications, Teachers College, Columbia University, 1928, p. 133.

[6] Engelhardt, N. L., and Engelhardt, Fred, *Planning School Building Programs*, Bureau of Publications, Teachers College, Columbia University, 1930, p. 263.

Relative Salaries for Different School Positions

Walter Crosby Eells, Professor of Education, Stanford University

What should be the relative salaries for different types of positions in the school service? The superintendent of schools, of course, should receive more than the classroom teacher. But, how much more? A principal should receive more than a janitor. But, how much more? There is no final and definite answer to these questions, but considerable light can be thrown upon them by considering the relative salaries for different positions actually found in various groups of cities. Common practice throughout the country is the best guide we have at the present time. In Table I the median salary is given for various school positions in cities whose population is between 30,000 and 100,000. The first column is based upon 204 cities in all parts of the United States; the second upon eleven California cities; the third is for the city of Fresno.[1]

TABLE I. Median Salaries for School Positions in Cities of 30,000 to 100,000 Population, 1930–31

	United States	*California*	*Fresno*
Administrators			
Superintendent	$6,758	$7,200	$6,500
Assist. supt.	4,583	5,640	4,500
Principals			
Senior high	4,281	4,500	4,100
Junior high	3,353	3,850	3,400
Elementary	2,646	3,067	3,017
Supervisors			
Art and music.....	2,544	2,900	2,820
Teachers			
Senior high	2,111	2,660	2,516
Junior high	1,860	2,405	2,097
Elementary	1,609	1,954	1,936
Kindergarten	1,609	1,900	1,850
Others			
Nurses	1,651	1,600	1,850
Janitors	1,444	1,600	1,350

Comparisons of relative salaries for the different groups will be much easier if they are reduced to comparable units. For this purpose we shall take the salary of elementary-school teachers as 100 and express all other salaries in each column in Table I in terms of this base. Elementary-school teachers form decidedly the largest class of school employees in the system and their salaries are probably the most stable. Results on this basis are given in Table II.

TABLE II. Relative Salaries for School Positions in Cities of 30,000 to 100,000 Population, 1930–31 (Elementary Teachers = 100)

	United States	*California*	*Fresno*
Administrators			
Superintendent	420	368	336
Assist. supt.	285	289	232
Principals			
Senior high	266	230	212
Junior high	208	197	176
Elementary	164	157	156
Supervisors			
Art and music	158	148	146
Teachers			
Senior high	131	136	130
Junior high	116	123	108
Elementary	*100*	*100*	*100*
Kindergarten	100	97	96
Others			
Nurses	103	82	96
Janitors	90	82	70

The relations given in Table II may be shown more clearly if exhibited in graphic form. This is done in Figure 1.

From Table II it appears, for example, that throughout the country the average superintendent in cities of 30,000 to 100,000 population is paid four and one-fifth times as much per year as the average elementary teacher; in California he receives three and two-thirds times as much; in Fresno three and one-third times as much. Similar comparisons may be made with the other positions listed. It is noticeable that there is the same order of increase in all three columns. The most striking variations of Fresno from the California figures come in the case of administrators, senior- and junior-high-school principals, junior-high-school teachers, and janitors. In all of these Fresno is relatively low. In the United States, for example, the average salary to janitors is nine tenths that of an elementary teacher; in California cities it is eight tenths; in Fresno it is seven tenths. Such variations from accepted practice and state and national experience should be taken into consideration in contemplated revisions of salary schedules.

Similar comparisons for any other city for which data are available can easily be made with the given group of California cities or with the practice in the country as a whole in cities of 30,000 to 100,000 population.

For cities larger or smaller than the group thus far discussed, similar information is given as to median salaries in Table III. The information in the first column is based upon reports from 88 cities of over 100,000 population; that in the second column from 204 cities of 30,000

(Concluded on Page 78)

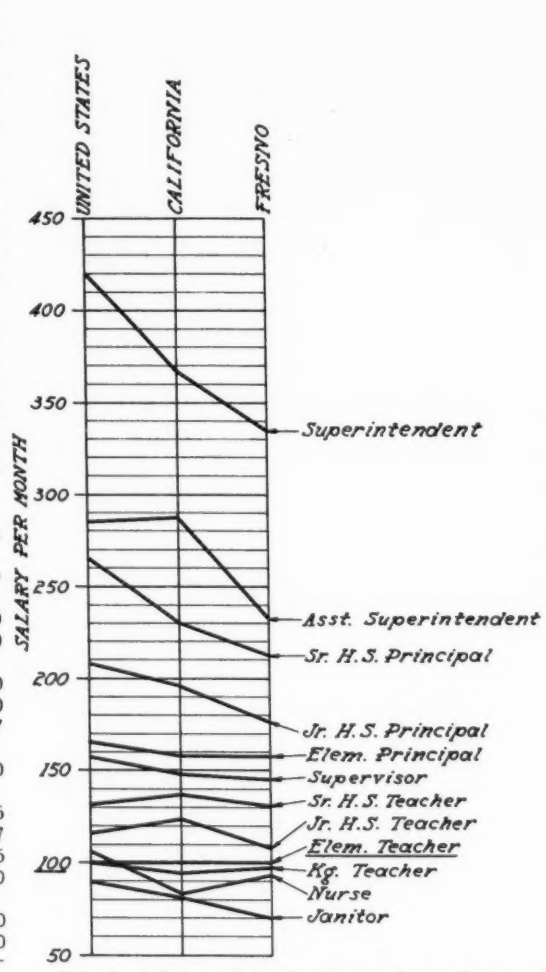

FIG. I. Relative Salaries for Various School Positions in cities of 30,000 to 100,000 population, 1930 to 1931.

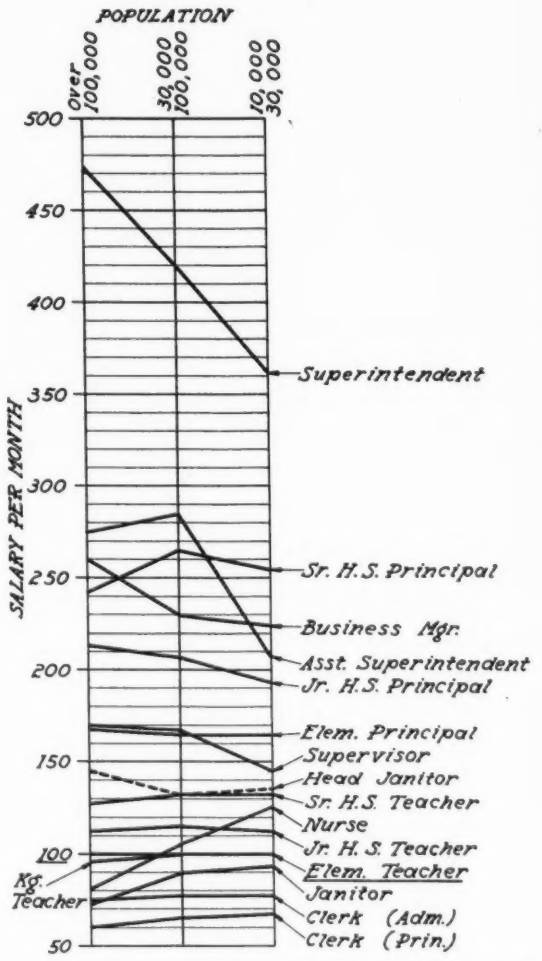

FIG. II. Relative Salaries for Various School Positions in cities of 10,000 to 30,000 population, 30,000 to 100,000 population, and over 100,000 population in the United States, 1930 to 1931.

TABLE III. Median Salaries for School Positions in Three Groups of Cities in the United States, 1930–1931

	Large Over 100,000 (88)	*Medium 30,000–100,000 (204)*	*Small 10,000–30,000 (449)*
Administrators			
Superintendent	$10,000	$6,758	$5,149
Assistant superintendent	5,786	4,583	2,950
Business manager	5,500	3,690	3,200
Principals			
Senior high school	5,100	4,281	3,613
Junior high school	4,500	3,353	2,763
Elementary (supervising)	3,519	2,646	2,349
Supervisors			
Vocational	4,433	3,413	3,025
Health	4,120	2,520	1,875
Physical education	3,690	2,933	2,344
Manual training	3,567	3,050	2,365
Music	3,556	2,693	2,043
Primary grades	3,500	2,800	2,217
Art	3,383	2,395	1,875
Home economics	3,271	2,485	1,832
Penmanship	3,083	2,320	1,888
Teachers			
Senior high school	2,731	2,111	1,876
Junior high school	2,348	1,860	1,619
Elementary	*2,118*	*1,609*	*1,428*
Kindergarten	2,077	1,609	*1,428
Others			
Nurses	1,715	1,651	1,798
Clerks (adm. and sup. offices).....	1,581	1,268	1,113
Clerks (principals' offices)	1,281	1,046	966
Janitors, head	3,050	2,114	1,892
Janitors, other	1,541	1,444	1,347

*Kindergarten teachers are not reported separately from elementary teachers in cities of 10,000 to 30,000.

TABLE IV. Relative Salaries for School Positions in Three Groups of Cities in the United States, 1930–31

	Large Over 100,000	*Medium 30,000–100,000*	*Small 10,000–30,000*
Administrators			
Superintendent	472	420	361
Assistant superintendent	273	285	207
Business Manager	260	229	224
Principals			
Senior high school	241	266	253
Junior high school	212	208	193
Elementary (supervising)	166	164	164
Supervisors			
Vocational	209	212	212
Health	195	157	131
Physical education	174	182	164
Manual training	168	190	166
Music	168	167	143
Primary grades	165	174	155
Art	160	149	131
Home economics	154	154	128
Penmanship	146	144	132
Teachers			
Senior high school.....	129	131	131
Junior high school	111	116	113
Elementary	*100*	*100*	*100*
Kindergarten	98	100	*100
Others			
Nurses	81	103	126
Clerks (adm. and sup. offices)	75	79	78
Clerks (principals' office)	60	65	68
Janitors, head	144	131	132
Janitors, other	73	90	94

*Kindergarten teachers are not reported separately from elementary teachers in cities of 10,000 to 30,000.

[1]The salary data in this paper are taken from the *Research Bulletin of the National Education Association*, May, 1931, and from the *Special Salary Tabulations* of the Research Division of the National Education Association, May, and June, 1931. The information was originally assembled for use in an intensive study of salaries in the school system of Fresno, California. See Walter Crosby Eells, *Salary and Cost Study of Fresno Schools*, Fresno, California, May, 1932, 192 pp.

The Utilization of Elementary School Buildings

Stuart D. Fink, University of Minnesota

The size of the capital expenditures involved in the erection of the modern school plant has long since focused attention upon possible economies in the planning of these plants. Studies of the use actually being made of school buildings are an outgrowth of the movement. Data relating to the utilization of secondary-school plants have appeared from time to time over a period of hardly more than six or seven years but have not been extensive in amount. Morphet's study[1] is the classic in this field and the one really extensive treatment. During recent years many published building surveys have concerned themselves with the objective measurement of utilization.

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This is not so in the case of an elementary-school building. True, the same general techniques may be employed. They may even be simplified. But there is available in literature no data setting forth the extent of utilization of any considerable number of elementary-school plants.

This lack of attention to the use of the elementary building is probably accounted for by reason of the fact that maladjustment of educational program to physical plant more readily occurs in the secondary school. The curriculum is broader, the program more complicated, and the building more intricate in its internal design. It has not necessarily been assumed that there is a dissimilar problem in connection with the elementary-school building; still this phase of the problem has been neglected. The assumption has probably been that the more acute problem lay with the high-school building. This may or may not have been true.

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TABLE I. Distribution of 77 Permanent Buildings by Percentage of Room and Pupil-Station Utilization

	Number of Buildings	
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Total number of buildings	77	77
Percentage range	45–86	41–81
Median percentage	78	68

Methodology

Utilization percentages (Table I) were calculated by the use of a simplified form of Morphet's formula.[4] These figures, representing utilization of entire buildings, do not, in fact, do so. They are, in actuality, an average for each building of the percentages of use of only certain of the rooms in the building. In general, the figure represents an average of all full-sized instructional rooms except gymnasium-auditoriums. Also excluded are storerooms, administrative and health suites, locker-shower rooms, the heating-ventilating plant, and a few odd-shaped, undersized rooms.

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Now just how significant are these figures? Do they represent a normal or an unusual situation? Such questions are not easily answered. Comparable data from other cities are not available for elementary-school buildings. Comparisons must be made, if at all, with secondary schools. This may be misleading if not done with caution. Elementary- and secondary-school buildings are more or less incomparable from the very nature of their programs. Different methods used in making utilization studies must also be taken into account.

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Finally, it would seem that instances are not infrequent when local situations render a seemingly low percentage of use quite satisfactory. Consider, for example, a city having numerous, old, three-story buildings. If the present policy of the board of education prohibits the use of those third-floor rooms for instructional purposes, percentages of use for these buildings as a whole will be low. In terms of that local situation, however, the percentages may be quite satisfactory.

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Utilization of Regular Classrooms

Utilization as evidenced by the building totals of Table I indicates simply what proportion of rooms or stations are likely to be in use at a given time. For example, if room use in a given building is found to be at 80 per cent, then we may expect about 1 room in 5 to be vacant in this building during the day. But building totals do not show what specific rooms, or types of rooms, are in use and what ones are vacant in such a building.

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[6]Engelhardt, N. L., and Engelhardt, Fred, *Planning School Building Programs*, Bureau of Publications, Teachers College, Columbia University, 1930, p. 263.

Analysis of usage by specific types of rooms may reveal that each and every building provides a locker-shower room absolutely unused or that libraries are used but 10 per cent of the school week — this in spite of a rather high building average. Obviously space provisions so little used, or not used at all, require investigation. They may or may not be justified on other grounds.

Building totals, then, are useful for portraying a general situation, but they become most significant when studied in connection with an analysis of the use of each type of room in the building.

In this study an analysis of the extent to which rooms assigned to the several grades (as "homerooms") were being used resulted in the condition shown in Table II. Within this table the grades have been grouped roughly according to the length of time in the school day for these grades, those being in session about the same length of time per day being grouped together.

It will be noted that regular grade classrooms are characterized by almost uniformly greater use than is made of the buildings as units (Table I). The explanation for this situation is fairly obvious. Building totals are derived from an average of room totals (Table I). The regular classrooms of Table II are the most used rooms in each building. Building averages are decreased by reason of special instructional rooms being used far less (Table IV) than regular grade rooms.

The fact of upper grade rooms being, in general, more used than the lower is also evident (Table II). This is accounted for by reason of the fact that upper grades have longer school hours. This simple matter of the varying length of the weekly time schedule accounts for the progressive increase in both types of use throughout the grades, excepting only the seventh and eighth. In the case of these two grades, Minneapolis practices departmentalization, so that while the school day is no longer than that of the fifth and sixth grades, the pupils of the departmentalized grades rotate around among several rooms, including such special rooms as industrial and household arts. Time spent in these special rooms necessarily cuts down the usage of the homerooms.

TABLE II. Median Percentage of Room and Pupil-Station Utilization of Regular Classrooms by Grade Groups[1]

Grade Groups	*Kindergarten Preprimary Grade 1*	*1 and 2 Combined*	*2–3–4*	*4 and 5 Combined*	*5–6*	*7–8*
Median percentage of room utilization.....	77.3	82.9	82.7	86.9	87.1	86.2
Median percentage of pupil-station utilization	69.5	71.5	76.5	78.5	79.3	68.0
Total number of rooms concerned.....	280	33	493	23	312	94
Total number of buildings concerned.....	77	33	77	23	75	18

[1]Medians are calculated from the averages of the several grade groups within each building. For example, 77.3 per cent represents the use made of kindergarten, preprimary, and first-grade rooms in the median building of 77 buildings housing such grades. This building may have had several rooms housing these grades. The average use made of these rooms in this median building is 77.3 per cent.

If, then, the extent of utilization of grade rooms, for example the sixth, is so largely dependent upon the time element, it is pertinent to inquire to what degree the several grades use their rooms of the total time they each are in session. For this purpose the column headed "Normal Maximum Percentage of Utilization" (Table III) represents a calculation of the percentage of the standard school week (1575 minutes) that each group of grades may be expected to be in occupancy of the homeroom. The second, third, and fourth grades, for example, are in session only 1500 minutes per week, and of that time there are certain periods when these rooms may be expected to be totally unoccupied by reason of physical education, assembly, activity, or other periods when the presence of pupils is required in other rooms of the building. The second, third, and fourth grades, then, will normally be in occupancy of the homeroom a maximum of 83.1 per cent of the standard school week.

TABLE III. Actual Median Percentage of Utilization Compared with Normal Maximum Percentages by Grade Groups in Regular Classrooms

Grade Groups	*Normal Maximum Percentage of Utilization*	*Actual Median Percentage of Utilization*		*Deviation from Normal Maximum Percentage*	
		Room	*Pupil Station*	*Room*	*Pupil Station*
Kindergarten Preprimary Grade 1.....	77.6	77.3	69.5	—.3	—8.1
1 and 2 Combined.....	83.1	82.9	71.5	—.2	—11.6
2–3–4	83.1	82.7	76.5	—.4	—6.6
4 and 5 Combined.....	87.3	86.9	78.5	—.4	—8.8
5–6	87.3	87.1	79.3	—.2	—8.0
7–8	91.4	86.2	68.0	—5.2	—23.4
Average Deviation				—1.1	—11.0
Median Deviation				—35	—8.45

In the light of these normal maximums the actual median percentages of room and station use take on greater meaning, for there may be seen to be a surprising degree of correspondence (Table III). Each group of grades measures up in room use very closely to the maximum that may be expected of it, excepting only the seventh and eighth grades where, as has been explained, departmentalization is practiced.

When pupil-station use is compared with the normal maximum, the case is somewhat different, pupil-station use lagging well behind. The reason is elemental to this type of study. Unless a room or building is used by more pupils than it has pupil stations, it can never have a greater percentage of pupil-station use than of room use. Since rooms are usually provided with stations to accommodate the largest class using the room, and since all these stations are not in use each period the room is occupied, the percentage of pupil-station use must necessarily be lower than that for room use.

The tendency in Minneapolis is for station use to be about 10 per cent lower than room use. As far as the regular classrooms of Table III are concerned, pupil-station use is 9.9 per cent lower on the average, by reason of a notable deficiency in the seventh and eighth grades. In these grades, stations are used to the extent of 68 per cent of the school week in the median school, while rooms are in pupil use 86.2 per cent of the time. This is a situation which again is to be explained largely on the basis of the existing departmental organization. Each classroom must be equipped for the maximum number of pupils who are to use it at any period. Consequently, if there is one large class section and three small ones, stations in all four rooms will considerably exceed requirements about three fourths of the school day.

Utilization of Special Rooms

In spite of the fact that regular classrooms are in pupil use a gratifyingly large proportion of the time each grade is in session, the same situation was not found to obtain for all classrooms. The explanation is to be found in Table IV wherein are detailed the percentages of utilization for the several types of what may be called the special instructional rooms.

Each of these types of rooms is available for use 100 per cent of the school week but is actually used much less than that. Industrial and household arts and facilities will be seen to surpass other types of special rooms, while the auditoriums and small activity rooms are least used. This condition results in Minneapolis from the fact that the several types of special rooms are to be found in large and small buildings alike. Now by the very nature of things it will be impossible in the Minneapolis elementary-school organization for any special rooms to be much used unless building enrollment is quite large. Where, in this situation, a gymnasium, or perhaps an auditorium, is provided in a small 10-room building, it will necessarily be less used than in a building with twice the enrollment. Consequently the conclusion seems inevitable that the provision of space for special types of rooms must be justified on other bases than a high percentage of utilization.

TABLE IV. Median Percentage of Room and Pupil-Station Utilization for Several Types of Special Instructional Rooms

	Type of Room					
	Industrial Arts	*Household Arts*	*Gymnasium-Auditoriums*	*Auditoriums*	*Full-Size Activity Rooms*	*Small Activity Rooms*
Median percentage of room utilization.....	67.5	42.5	48.5	12.5	36.2	28.7
Median percentage of pupil-station utilization	42.5	27.0	No Data	No Data	No Data	No Data
Total number of rooms concerned.....	18	28	71	5	90	18
Total number of buildings concerned.....	15	16	69	5	44	13

It will, of course, be quite possible in a small building with a small enrollment to provide a variety of special classrooms and to so administer the instructional program that each room is used every minute of the school day. Under such conditions room usage will be very high but underusage will inevitably be reflected in the percentage of pupil-station use. A class may not be in two places at the same time. If half of the class goes to the gymnasium and the other half remains in the homeroom, pupil-station use might suffer in consequence, though room use may appear in a very favorable light. The complementary nature of the two measures of use is here well illustrated.

The Problem of the Special Room

This failure of special rooms, as groups, to measure up to the use standards maintained by regular classrooms presents a most difficult administrative problem. Here are rooms that do not justify their existence by high or even moderately high percentages of use. The administrator must weigh the educational advantages of these facilities against the capital expenditure involved in equipping and maintaining them for what amounts to part-time use. If they be deemed a necessary part of the elementary-school plant, then there still remains a problem, one that must be decided locally. That is, shall specialized rooms become an integral part of all elementary-school buildings or shall they be limited, for economy's sake, to buildings of a certain minimum size?

Service Rooms

A really complete study of utilization in any given building should take into account not only instructional space but other types as well. The instruction carried on in a building is facilitated by supplementary services and by an administrative organization. Among the various services are the provisions for administrative quarters, a nurse, perhaps, lunchroom, locker-shower

(Concluded on Page 78)

ESSEX COUNTY GIRLS' VOCATIONAL SCHOOL, NEWARK, NEW JERSEY
Guilbert and Betelle, Architects, Newark, New Jersey.

Vocational Building to House a Vocational School

The Essex County Vocational School for Girls

The vocational school has presented to school authorities and architects a new type of problem, or rather a complicated collection of problems, for which there has been very little precedent in existing buildings and in well-established educational procedure. The essential difficulty in planning a vocational school arises from the fact that a great variety of activities is carried on, each requiring a special type of room with distinctly different equipment, furniture, and machinery. The character and content of the courses is anything but fixed, and improvements and changes are being constantly made not only from year to year but even within a given school year. The vocational school offers a wide variety of courses, and it is not uncommon that a single building has groups which come for one day each week, other groups which come for the entire day and for every day of the school week, still other groups which come for short, intensive courses, and finally groups which come at night or during a short period for a portion of the school year.

A building which is a complete solution of the difficult problem of planning, construction, and equipment is the new Girls' Vocational School of Essex County (Newark), New Jersey. This school is at once a vocational school, a continuation and part-time school, an opportunity school, an evening school for adults, and a school in which short-unit courses, coöperative courses, and general-improvement courses are offered. The purpose is to furnish instruction in the fundamentals of a trade and in subjects closely related. While the central aim of the school is vocational efficiency, preparation for citizenship is not neglected.

The school is open to girls at least 14 years of age and to adults who desire and who are in position to avail themselves of any of its facilities. Intensive trade and commercial courses are offered in the occupations afforded by the community which includes the city of Newark,

AUDITORIUM, ESSEX COUNTY GIRLS' VOCATIONAL SCHOOL, NEWARK, NEW JERSEY
Guilbert and Betelle, Architects, Newark, New Jersey.
The auditorium is of modernistic design and decoration, and has a full stage equipment for school plays. The seating capacity including the gallery is 656 persons.

DETAIL OF MAIN ENTRANCE, ESSEX COUNTY GIRLS' VOCATIONAL SCHOOL, NEWARK, NEW JERSEY
Guilbert and Betelle, Architects, Newark, New Jersey.
This portion of the building is the only part on which money has been expended for architectural details or ornament and is built of limestone. The rest of the building is of severe and simple character.

the cities of Montclair and Bloomfield, and the smaller villages of East, West, and South Orange and Irvington, as well as Nutley and Belleville. These communities range in character from intensely industrial and commercial centers to medium class and fine residential sections. The courses offered include:

Art trades — applied design, craftwork, dress design, fashion illustration.

Beauty culture.

Food trades — cooking, cafeteria and tearoom work, tearoom management.

Mother's assistant.

Needle trades — dressmaking, garment making, millinery.

Business trades — clerical work, typewriting and duplicating.

Dental assistance.

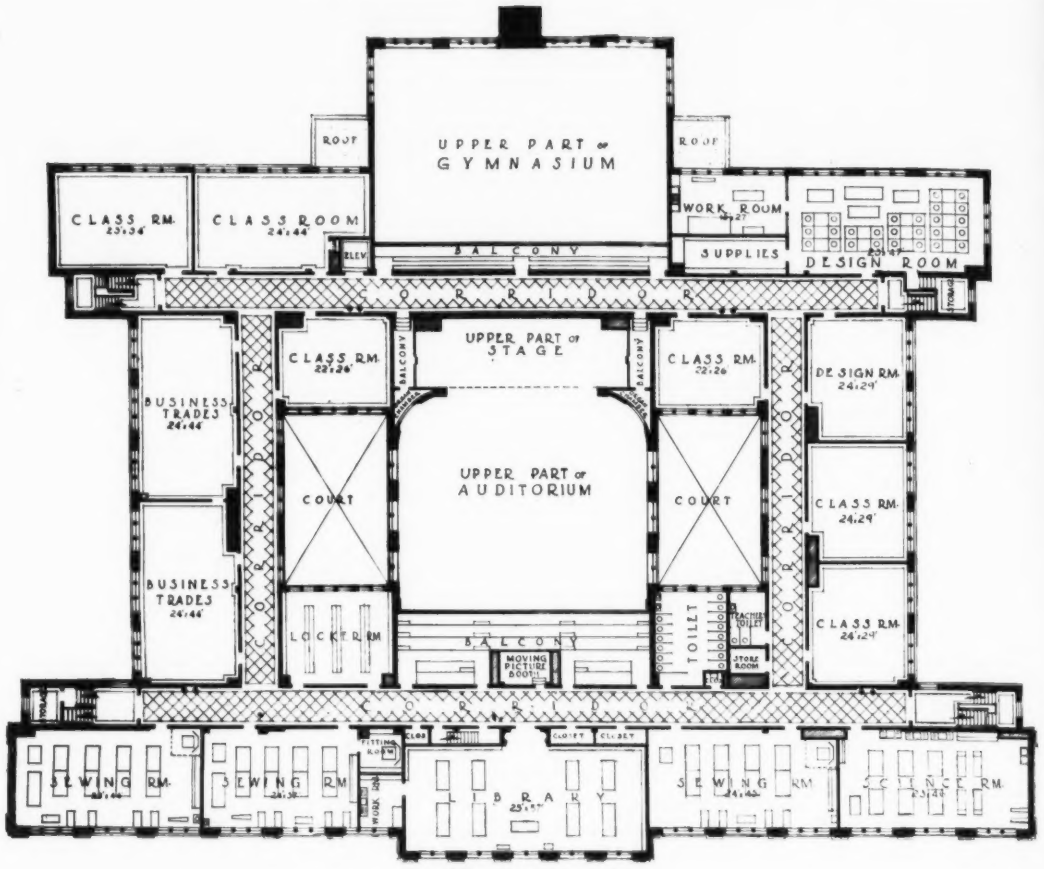
High-school coöperative courses.

Half-time coöperative courses in retail selling.

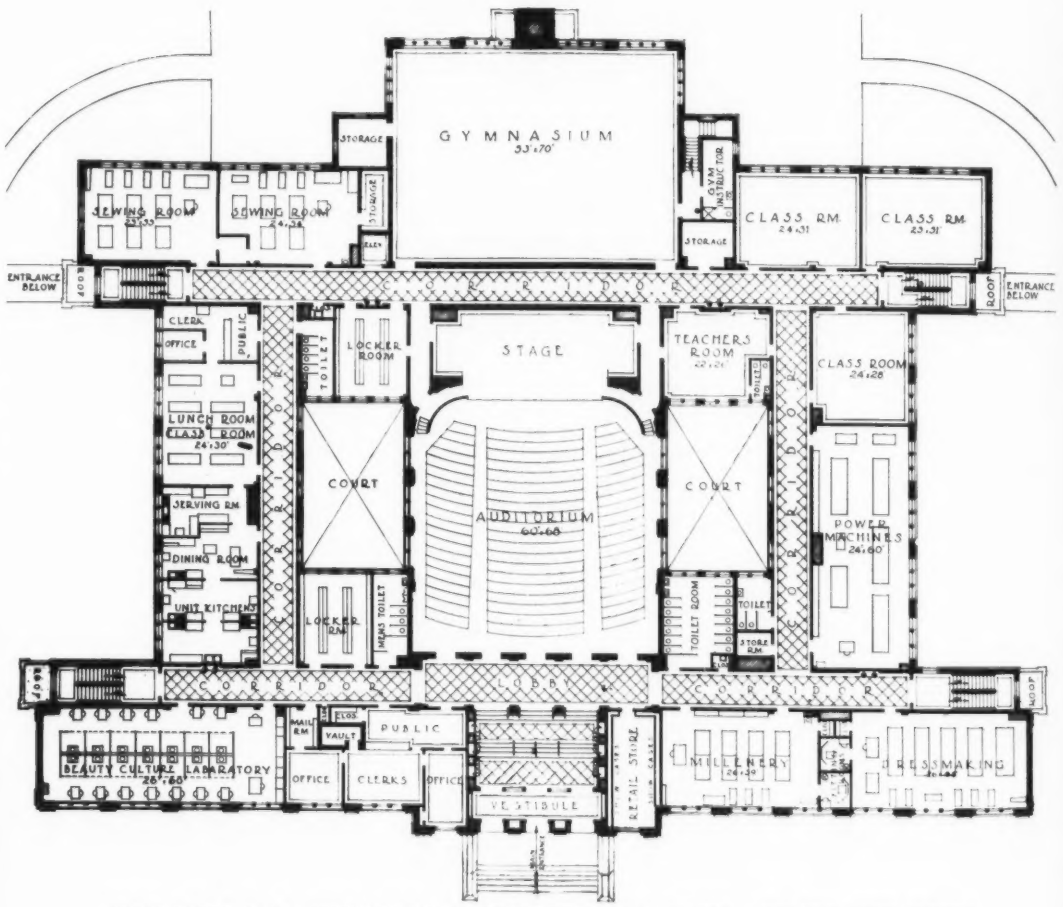
The school has a very practical approach to the usual difficult questions of length of course, entrance, graduation, etc. There is no fixed time for the completion of any course, and the students may enter and progress according to their best ability. While terms begin in September and February, there is practically no limit to the arrangement of classes.

The school is operated on a strongly modified Dalton plan which allows for the greatest amount of independent work in individual progress. Teachers plan with the students, and the girls are given an opportunity to budget their own time and spend it on subjects where it seems to be of greatest need.

ESSEX COUNTY GIRLS' VOCATIONAL SCHOOL, NEWARK, NEW JERSEY
Selling methods, merchandising, and fashions are taught, and the girls are given practical experience in selling many of the products made in the school.
Students Selling in the School Store.



SECOND FLOOR PLAN



FIRST FLOOR PLAN, ESSEX COUNTY GIRLS' VOCATIONAL SCHOOL, NEWARK, NEW JERSEY
Guilbert and Betelle, Architects, Newark, New Jersey.

The school conducts a strong employment bureau for placing its graduates.

The building which houses this most interesting school is a three-story structure of modernistic design, developed in gray stone and buff brick.

The building has been planned for maximum efficiency in the use of space, and great care has been taken to maintain the unity of the several courses and departments.

The ground floor contains eight standard classrooms, a lunchroom with kitchen, a cooking laboratory arranged on the unit plan, advanced science kitchen, lockers and storage space, shower rooms and toilet rooms, and a dental technician's department. The last-mentioned room is arranged adjoining an exit and includes a large waiting room and restroom for the use of the "patients" which provide the practice opportunities for the students.

The first floor, which is entered through a wide vestibule that gives admission to the main lobby and the auditorium, is strongly departmentalized. Adjoining the main entrance on the one side there are the offices for the principal and his staff and the other side there is a completely equipped retail store through which the products of the school are sold. Large adjoin-

BEAUTY CULTURE LABORATORY, ESSEX COUNTY GIRLS' VOCATIONAL SCHOOL, NEWARK, NEW JERSEY

Here the girls are given scientific training in the fundamental methods and principles of beauty culture work in all its phases, together with shop management, etc.

DENTAL ASSISTANTS' LABORATORY, ESSEX COUNTY GIRLS' VOCATIONAL SCHOOL, NEWARK, NEW JERSEY

Students in this course are sought after in dentists' offices, because they are not only trained in dental assistants' work, but are also good office assistants, accustomed to keeping records and doing stenography and typewriting.

LABORATORY IN THE NEEDLE TRADES DIVISION, ESSEX COUNTY GIRLS' VOCATIONAL SCHOOL, NEWARK, NEW JERSEY

Here the students are taught all about the different fabrics, together with cutting, dyeing, and batik work.

ing rooms are used for millinery and dressmaking. A room measuring 24 by 60 ft. is devoted to power-machine operating in which children who intend to enter the needle trades are given experience under typical manufacturing conditions. A large beauty-culture laboratory finds not only a great number of applicants as students but has a constant supply of practice material in the nature of students. Additional sewing rooms, cooking laboratories, locker rooms, an office for the teachers, and three classrooms are to be found on this floor. The main floor of the auditorium, which measures 60 by 68 ft., and which has a complete stage, occupies the center of the building. A gymnasium at the rear measures 55 by 70 ft.

On the second floor the central room in interest is the library and reference room. There are also on this floor three large sewing rooms, a general-science laboratory, six classrooms, a suite of two large rooms for the business trades, and a large room for the art and craft trades.

MAIN ENTRANCE LOBBY, ESSEX COUNTY GIRLS' VOCATIONAL SCHOOL, NEWARK, NEW JERSEY

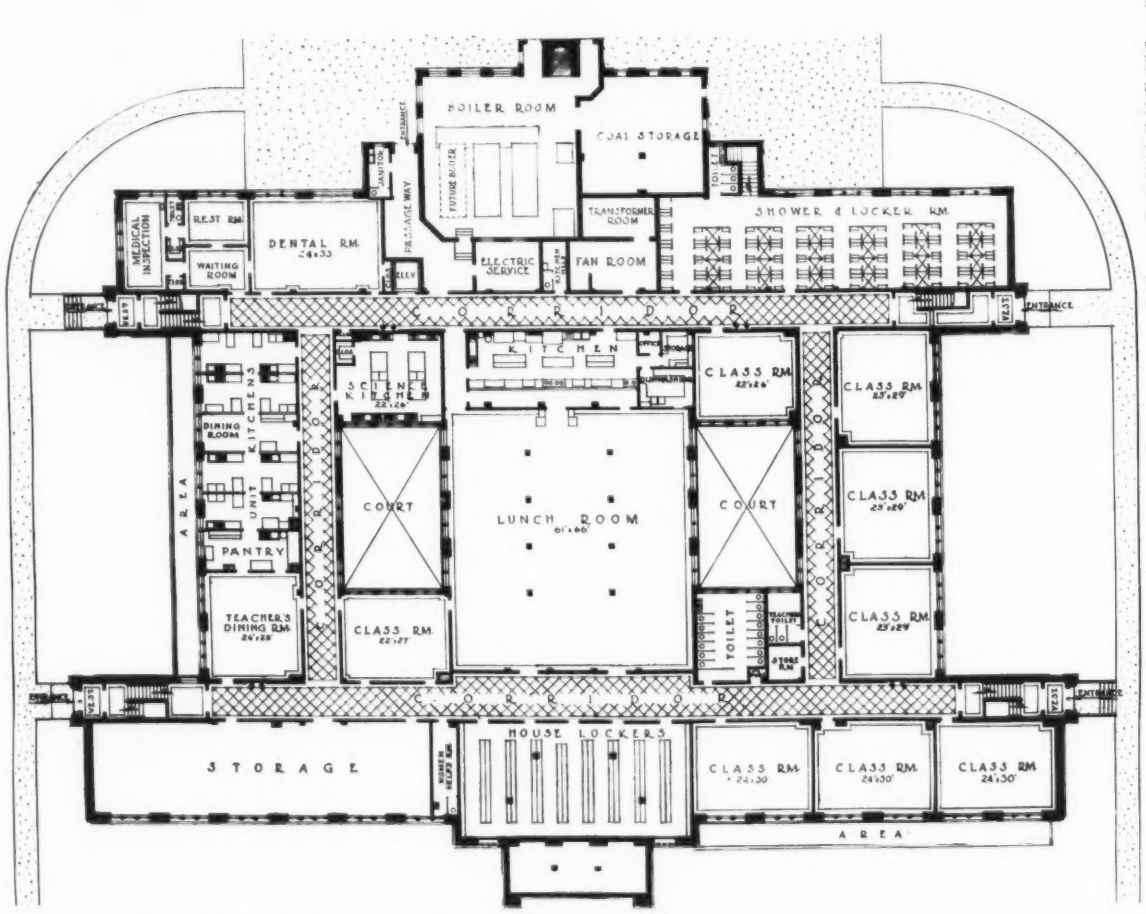
The walls of the entrance lobby are of glazed brick of different colors in a modernistic design. Attractive show windows are on each side wall and in these the students are trained in show window decoration.

MEDICAL INSPECTION ROOM, ESSEX COUNTY GIRLS' VOCATIONAL SCHOOL, NEWARK, NEW JERSEY

This unit adjoins the laboratory for the Dental Assistants, elsewhere illustrated. The illustration shows the doctor making a medical examination of a pupil while the nurse is taking the pulse, and the instructor in health education is also present. Dressing booths are across the rear of the room, while a restroom adjoins.

POWER MACHINE OPERATORS, ESSEX COUNTY GIRLS' VOCATIONAL SCHOOL, NEWARK, NEW JERSEY

Here the pupil is taught the making of garments in quantities under factory conditions. The average worker knows how to operate only one machine, but the pupils in this school are taught all phases of the work and have a great advantage over the ordinary garment worker.



GROUND FLOOR PLAN, ESSEX COUNTY GIRLS' VOCATIONAL SCHOOL, NEWARK, NEW JERSEY

Guilbert and Betelle, Architects, Newark, New Jersey

Locker rooms, toilets, and storage rooms complete this floor.

Considerable attention has been given in the finish of the building to meet the especial needs of the activities carried on in the various rooms. The floor material ranges from terrazzo to maple and linoleum according to the room. Wood trim has been generally held to a minimum, and the walls and ceilings are generally plastered. The entrance has been made particularly attractive by the use of harmoniously colored enameled brick, marble stairs, and terrazzo floors. The auditorium is modestly decorated in restrained modernistic style.

The building is constructed of concrete and steel. The heat is supplied by steam, with unit ventilation in each room and central fan ventilation in the auditorium and the gymnasium.

A Summary of Published Opinion on School Ventilation

Part III Continued. Annotated Bibliography on Schoolroom Ventilation

V. T. Smith, Bureau of Educational Research, University of Illinois

35. Lewis, S. R., "Practical Ventilation for Schoolrooms," AMERICAN SCHOOL BOARD JOURNAL, 77:53-4; 158; 161. July, 1928.

In this article Mr. Lewis seems to go over to the camp of the window-ventilation supporters. He says that "there seems to be some as yet unproved health quality in the environment of the pupils in naturally ventilated classrooms, particularly where the air supply has not all been heated by passing over heated surfaces." He then suggests several "reasonably possible agencies" for this assumed superiority of naturally ventilated rooms, as follows: lower temperature, invisible rays, reduced air motion, unheated air supply containing some "vital property," temperature variations.

Following this discussion, he proposes some plans for installing window ventilation. Finally, he suggests the mechanically delivered unheated air entering the room in such a way as to be diffused evenly with heated air.

36. Lewis, S. R., "Some Phases of the Planning and Installation of School Heating and Ventilating Equipment," AMERICAN SCHOOL BOARD JOURNAL, 66:38-40, 145, January, 1923.

He says that the direct-indirect (air through openings in outside walls and between radiator sections) should be condemned as useless — neither temperature nor volume nor dirt can be regulated — at mercy of winds must close inlets.

Indirect works fairly well when there is 40 deg. difference in temperature. With any modern heating and ventilating system, the windows in any room may be raised without affecting the ventilating of any other room.

Direct steam heating with window ventilation is exceedingly high in fuel consumption. It requires expert attention, a breeze and cold outside.

In a "split" system the tendency is to neglect ventilation. It is an advantage to have a system in which the room cannot be heated without being ventilated.

If all cracks are sealed so as to prevent rotation of old air, if the electric current is transformed into the less noisy direct current, if the air is properly filtered and humidified, if there is an automatic temperature regulator, if the air is delivered vertically, if the radiator is incased in a steel jacket to prevent overheating nearby pupils by radiation, if there is an individual fireproof vent flue from each room to prevent the stairways from becoming chimneys in case of fire, then, and only then, is the unit system desirable.

Direct radiators occupy otherwise valuable space.

This article is one of the most important in the list of articles by school-ventilation engineers.

37. Lewis, Samuel R., "Ventilating With Window Inlets," AMERICAN SCHOOL BOARD JOURNAL, 66:51-52, 133, June, 1923.

In this article Mr. Lewis states some of the disadvantages of the window-ventilation system. He tells of inspecting a large school in Michigan where window ventilation was found to be very unsatisfactory. He says in order for them to produce desirable conditions:

1. The inlets (teacher-controlled) must be open.
2. The area must be gauged by outside temperature, wind, suction.
3. The radiators must be heated.
4. The corridor doors must be closed.
5. It must be comparatively cold outside.
6. Frequent freezing of return pipes in very cold weather.
7. Impracticable and undesirable to enforce keeping of doors to corridors closed.
8. Corridors should have their own thermostat.

(Diagram of air currents given.)

38. Lewis, S. A., "School Building Ventilation," *Heating-Piping*, 1:494-6. October, 1929.

In this dialog between Mr. Lewis and Mr. Spafford (both editors) Mr. Lewis says: "The importance of this subject has been exaggerated. It is only important in the north where positive systems are required." The parties to the ventilation controversy seem to be becoming more tolerant. They are agreeing on reduced volume of air per person, more independence from outside weather conditions, and more appreciation of the fallibility of the human element. Ignorance is the cause of criticism of mechanical ventilation; ignorance in the design and *operation* of these plants. There is less criticism than is claimed."

39. McLure, J. Rankin, "The Ventilation of School Buildings, a study of Present Practices and Costs in the Light of Experimental Research," *Teacher's College Contribution to Education No. 157*, New York: Teachers College, Columbia University, 1924, 130 pp. (pp. 123–130 is bibliography).

Mr. McLure begins his study with the brief history of ventilation through the stages of:

1. The supposed injurious effect of carbon dioxide.
2. The toxic organic substance theory.
3. The importance of physical properties of air.

(*To be Continued*)

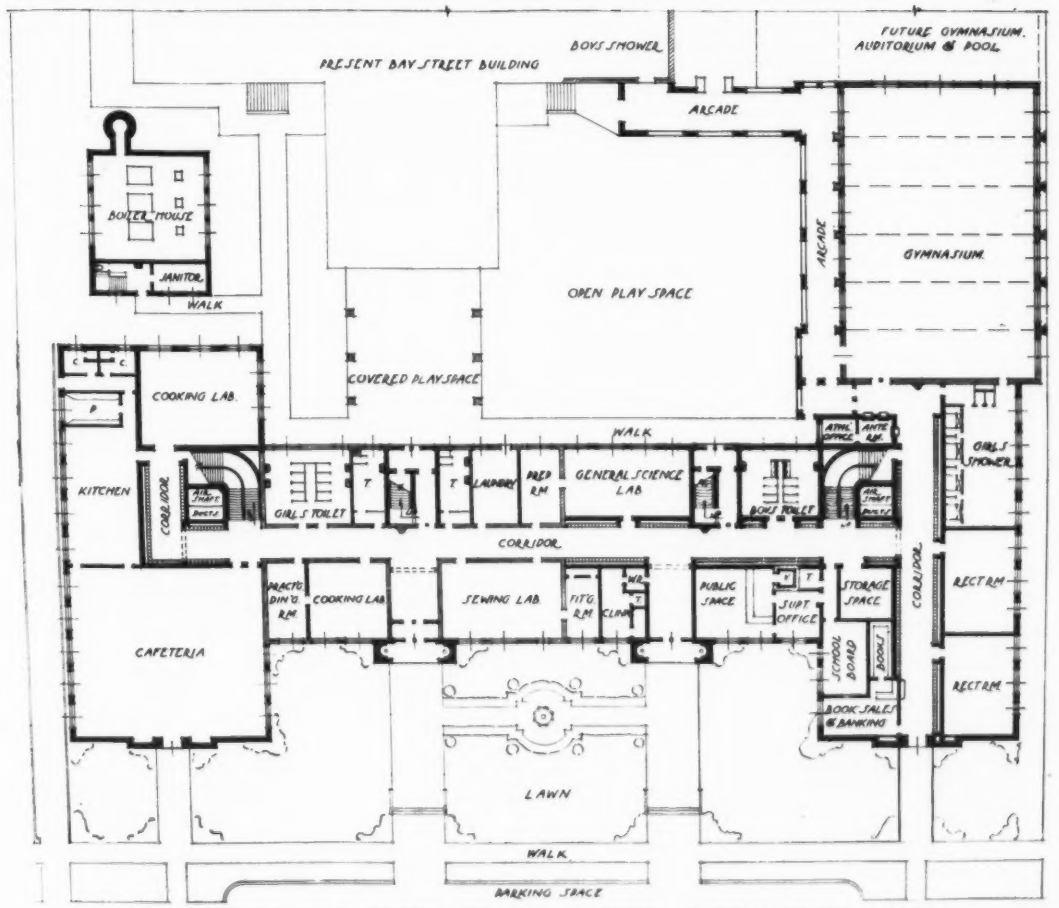
DAYTONA BEACH HIGH SCHOOL, DAYTONA BEACH, FLORIDA
Harry M. Griffin, Architect, Daytona Beach, Florida.

THE DAYTONA BEACH HIGH SCHOOL, DAYTONA BEACH, FLORIDA

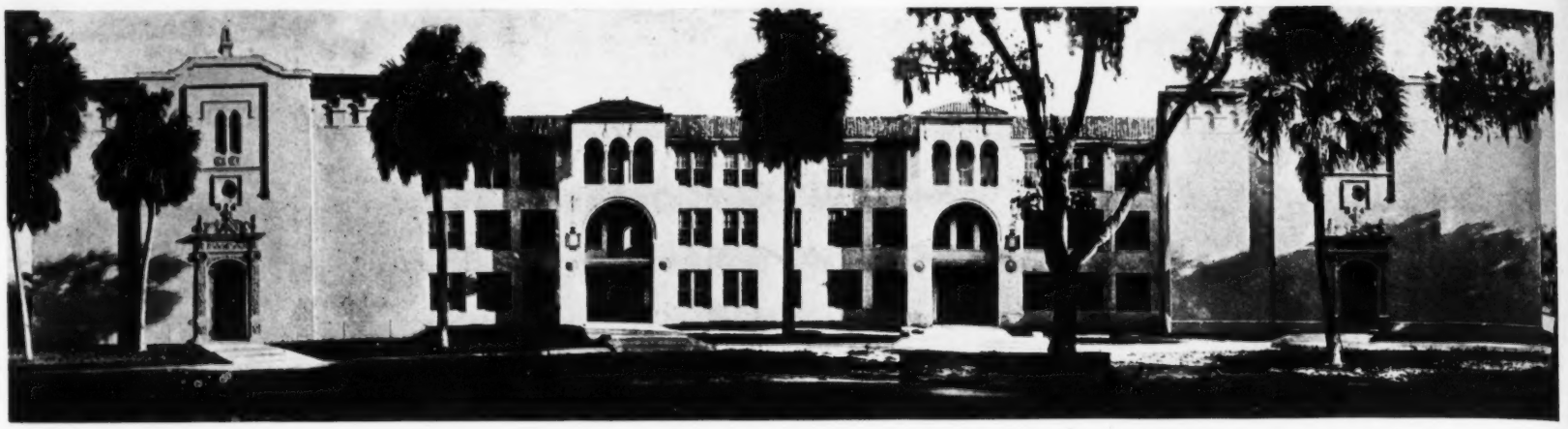
The Spanish antecedents of the community and semitropical climatic conditions have justified the very interesting use of Spanish Colonial architecture for the Daytona Beach High School at Daytona Beach, Florida. The building is extremely severe and economical in design and construction. Following Spanish precedents, the ornament has been limited to very interesting. florid doorways. The warm cream of the plain concrete walls contrasts beautifully with the varicolored red and yellow tiles of the roof, and the blue-gray of the stone ornament at the doorways.

The building is three stories high, with the ground floor on a level with the surrounding site. On this floor are the carefully grouped units of the home-economics department, the science department, the physical-education department, and the administrative department. The home-economics department has as its central feature the cafeteria, which has adjoining it a service kitchen, a cooking laboratory, a practice dining room, a laundry, a sewing laboratory, and a fitting room. The general-science laboratory has adjoining it a preparation room for the teacher.

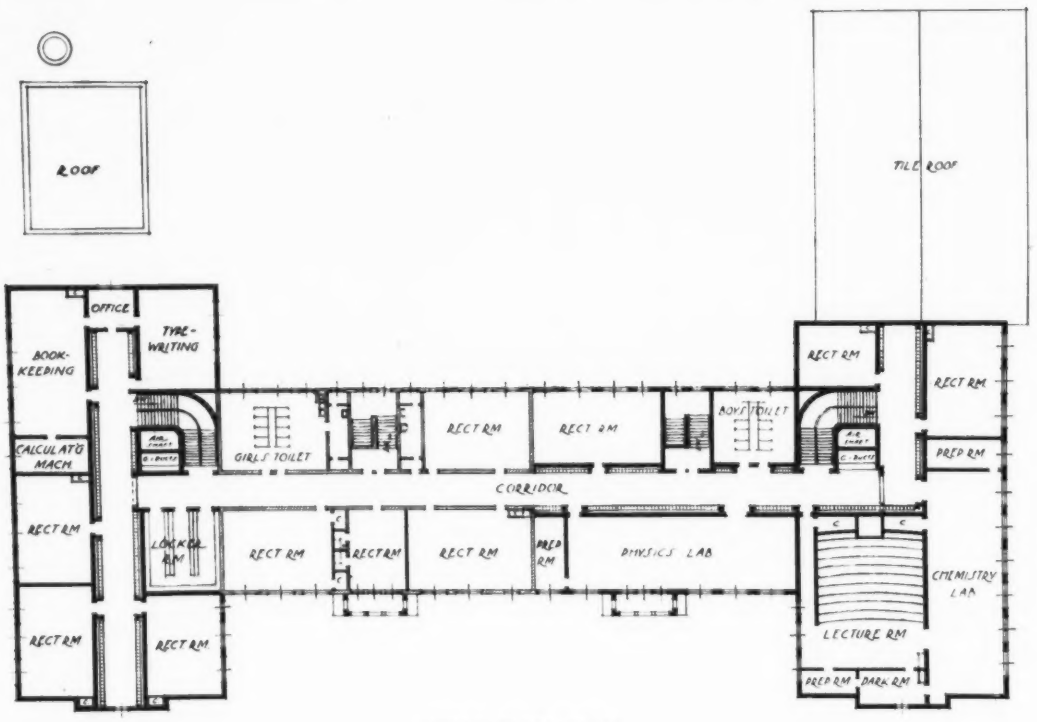
The general administrative offices of the school system which adjoin a front entrance, include a general office with public space, a private room for the superintendent of schools,



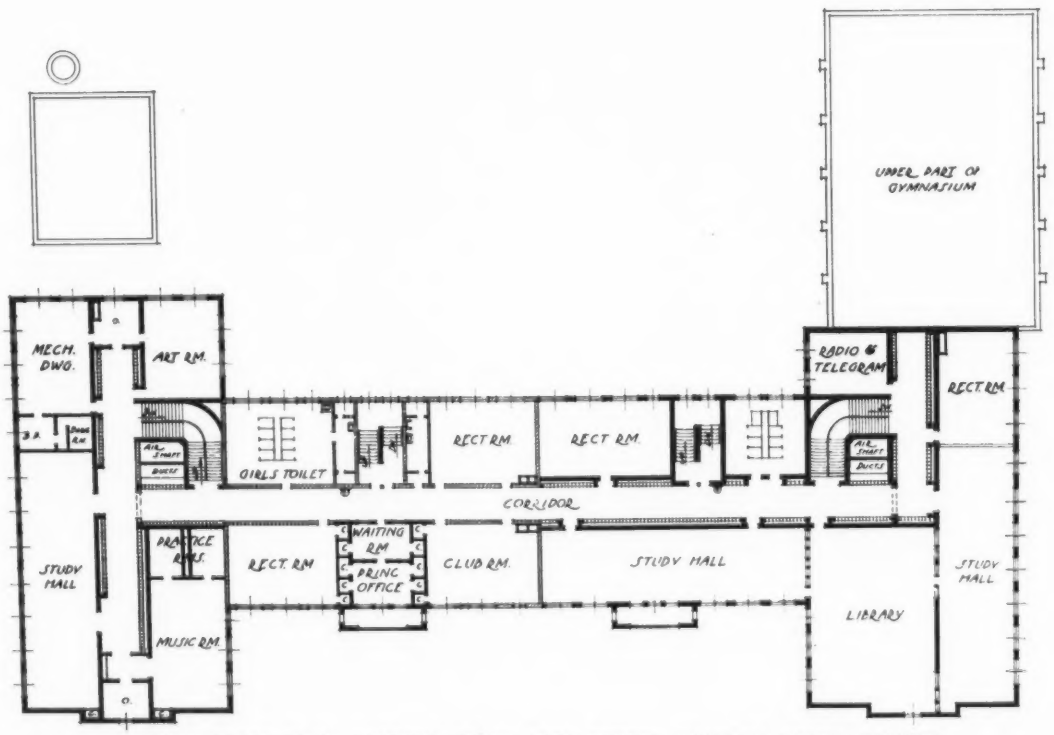
GROUND FLOOR PLAN, DAYTONA BEACH HIGH SCHOOL, DAYTONA BEACH, FLORIDA
Harry M. Griffin, Architect, Daytona Beach, Florida.



DAYTONA BEACH HIGH SCHOOL, DAYTONA BEACH, FLORIDA
Harry M. Griffin, Architect, Daytona Beach, Florida.



THIRD FLOOR PLAN



SECOND FLOOR PLAN, DAYTONA BEACH HIGH SCHOOL, DAYTONA BEACH, FLORIDA
Harry M. Griffin, Architect, Daytona Beach, Florida.

a meeting room for the board of education, a book salesroom, and storage space. The medical-inspection department has a separate office with a clinic and a waiting room. The gymnasium, which is of the simple exercise-room type, has adjoining it a large girls' locker and shower room. The boys' showers, lockers, etc., are accommodated in an older adjoining building which is connected by means of an arcade.

On the second floor there are three large study halls, which serve as home and recitation rooms, a music room, a mechanical-drawing room, an artroom, a clubroom, toilets, and offices for the principal. Three special rooms for the use of teachers are provided.

On the third floor there are ten recitation rooms, a suite of three rooms for the commercial department, a physics laboratory, with preparation room, chemistry laboratory, with preparation and teachers' rooms, toilet and locker rooms, and a large lecture room. The lecture room is arranged for larger social and meeting groups as well as the science lectures.

The building is constructed of concrete and tile, with a tile roof carried on a wood frame. The corridors and stairs are of concrete, with specially treated cement surfacing. The classrooms, auditorium, and gymnasium floors are of maple. The classrooms are fitted with composition blackboards and built-in cabinets. The corridors are fitted with built-in lockers.

The building is heated by means of direct steam, supplied by two oil-burning steel boilers. Thermostatic control is provided in all classrooms.

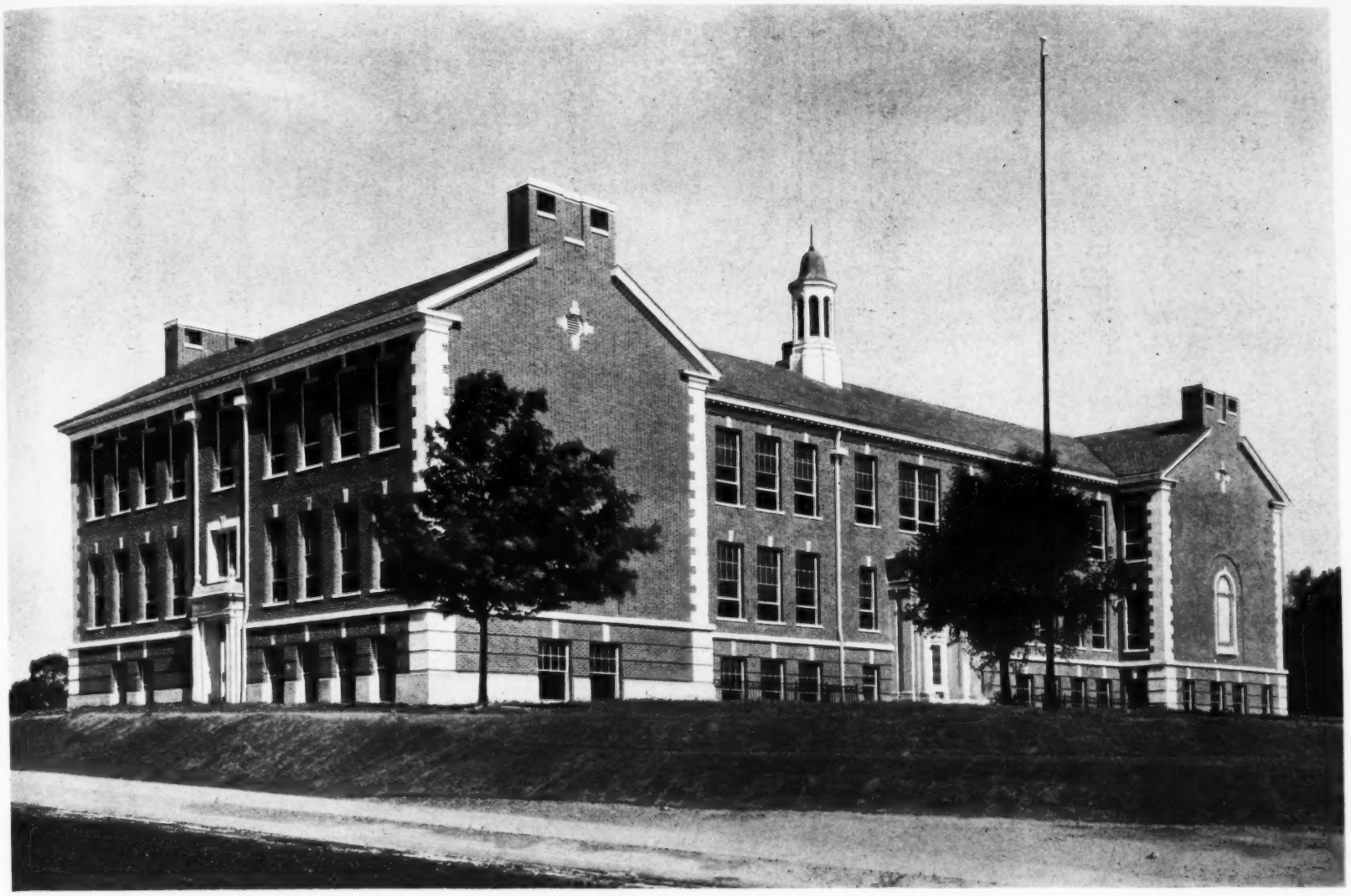
The electric equipment includes semi-indirect suspended lighting units, a complete system of clock and program signals, a radio installation in the auditorium, and intercommunicating telephones in all instructional rooms.

The sanitary equipment includes seat-action toilets, chinaware urinals, and china wall-type drinking fountains.

The building was erected near the close of the Florida land boom and cost $314,000, or 27.3 cents per cubic foot.

The building was designed by Mr. Harry M. Griffin, architect, of Daytona Beach, who has planned and constructed a large number of school buildings in the state.

ENTRANCE DETAIL, DAYTONA BEACH HIGH SCHOOL, DAYTONA BEACH, FLORIDA
Harry M. Griffin, Architect, Daytona Beach, Florida.



MARTHA A. HEYWOOD SCHOOL, TROY, OHIO.
Albert Pretzinger and Freeman A. Pretzinger, Architects, Dayton, Ohio.

A COLONIAL-STYLE SCHOOLHOUSE

The Heywood School at Troy, Ohio

A school building which rates especially high according to the N.E.A. standard for the utilization of space is the Margaret Heywood Elementary School, built in 1930–31 at Troy, Ohio, and occupied in September, 1931.

The building serves a well-settled residential section of the city in which it is not likely that there will be a considerable increase in school population. Accordingly the building has been planned as a complete unit without provisions for enlargement, and the most careful attention has been given to conserving the cubic content of the building and to allotting a maximum use of floor space to instructional purposes.

The building is designed in the formal Colonial style and has been worked out in red brick

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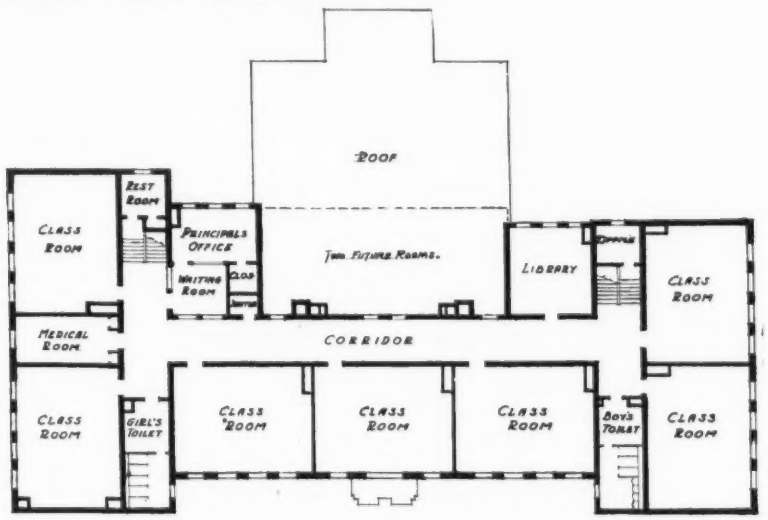
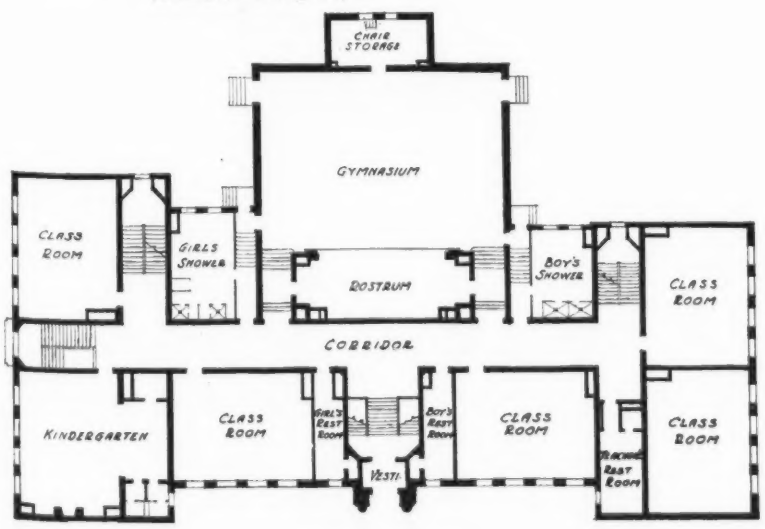
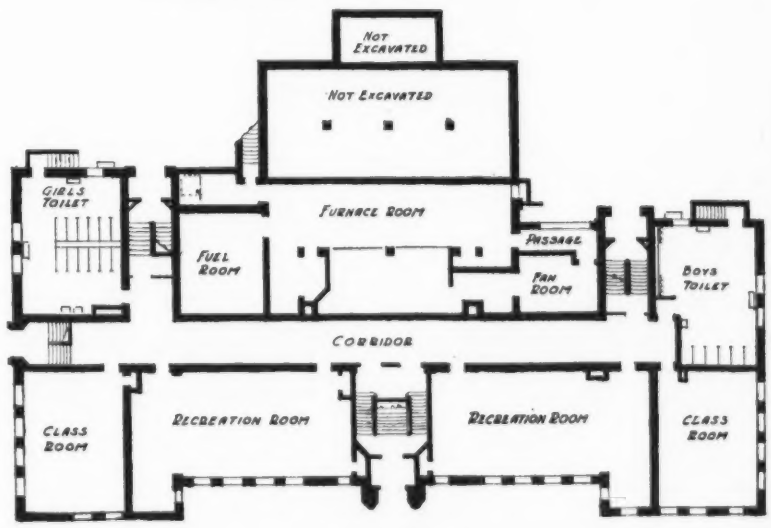


SECOND FLOOR PLAN



FIRST FLOOR PLAN



BASEMENT PLAN

MARTHA A. HEYWOOD SCHOOL, TROY, OHIO.
Albert Pretzinger and Freeman A. Pretzinger, Architects, Dayton, Ohio.

ADDITION TO VAN CLEVE HIGH SCHOOL, TROY, OHIO
Albert Pretzinger and Freeman A. Pretzinger, Architects, Dayton, Ohio.

WHEN THE HIGH SCHOOL OUTGROWS ITS BUILDING

The Van Cleve Auditorium-Gymnasium was begun in 1930 and was completed in 1931. It measures 160 by 400 ft. over all, and is entirely fireproof. The exterior facing is brick and the trim is limestone. The interior construction is concrete and steel. The floors and stairs and the wall base are terrazzo. The lobby and vestibule are finished with marble wainscoting and plaster walls and ceilings. The stairways have wainscoting of ivory glazed brick. The auditorium has a maple floor, ivory and green glazed-brick wainscoting, plaster walls, and an acoustical-tile ceiling. Terrazzo finish floors are used in the raised section of the permanent seating. The toilet rooms have terrazzo floors and marble wainscoting and toilet partitions.

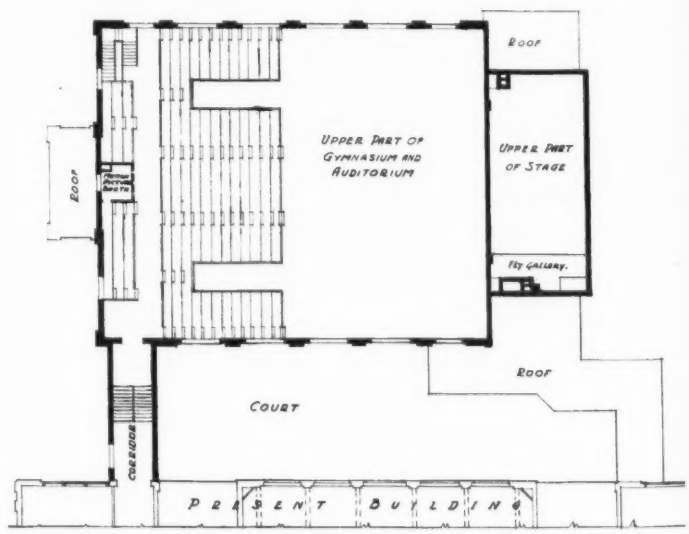
The building is heated by steam.

The stage has a complete equipment of electric lighting devices for theatricals, pageants, etc. There is also a full complement of scenery.

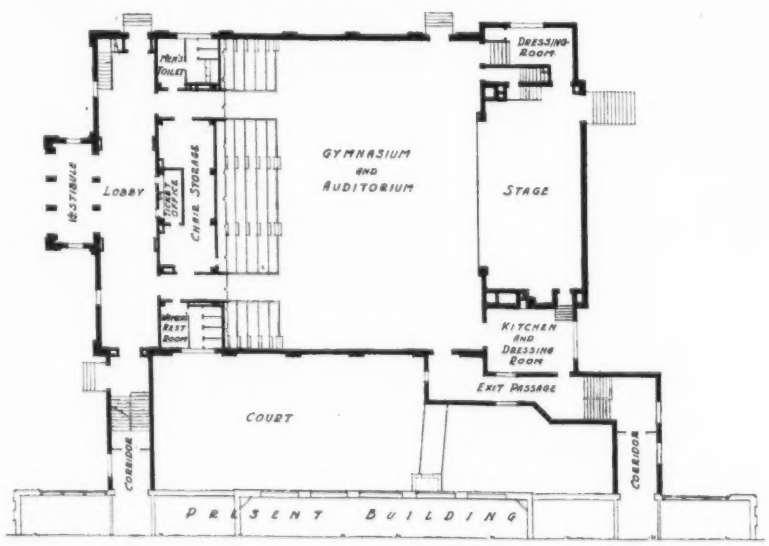
In the basement, which extends only under the stage, there are two shower rooms, and space for the heating apparatus. On the main floor a large chair-storage room has been provided to care for the movable seating. There are also separate toilets for men and women, a dressing room, and space for a kitchen which can be used when dinners are being served. The raised section of the permanent seating can be entered from the second floor of the high school proper as well as from the first floor.

The building has a total seating capacity of 1,200 and was erected at a cost of $109,000. An additional sum of $8,000 was spent for equipment. The cost complete was 25 cents per cubic foot.

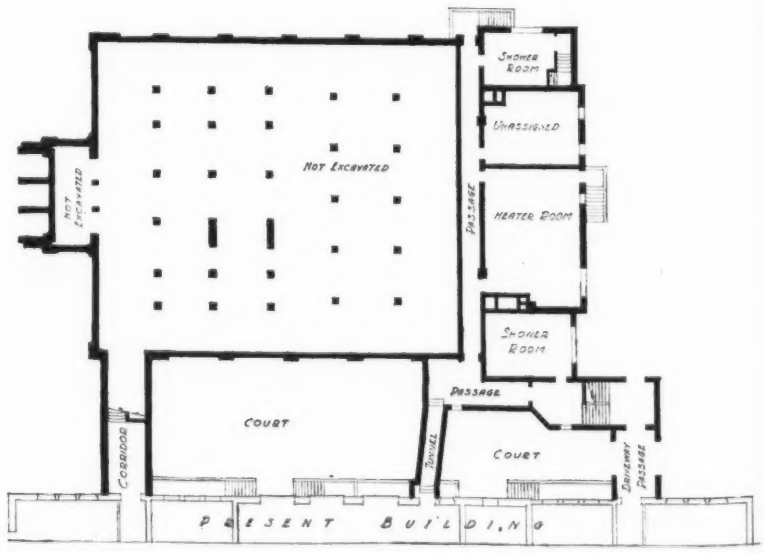
The building was planned by Messrs. Albert Pretzinger and Freeman A. Pretzinger, architects, Dayton, Ohio.



SECOND FLOOR PLAN
SCALE: 1/16" = 1'-0"



FIRST FLOOR PLAN
SCALE: 1/16" = 1'-0"



BASEMENT FLOOR PLAN
SCALE: 1/16" = 1'-0"

ADDITION TO VAN CLEVE HIGH SCHOOL, TROY, OHIO
Albert Pretzinger and Freeman A. Pretzinger, Architects, Dayton, Ohio.

The High-School Principal's Annual Report

J. Fred Murphy, Guidance and Dept. of Social Studies, Senior High School, Logansport, Indiana

Undoubtedly, every high-school principal at one time or another, asks the question, "What reports shall I make this year?" The question could be answered more readily if the principal had at his disposal information pertaining to the present administrative practices in making reports. Recently, I secured some interesting facts concerning the present status of the high-school principal's annual report (not statistical) to the superintendent and board of education. These facts should aid the high-school principal in determining the advisability of formulating a report and should provide the school board and the superintendent with criteria for judging the reports of the high-school principal.

Although a small percentage of high-school principals make such reports at the present time, school administrators, in general, are gradually placing more emphasis upon this practice. One hundred and forty-two principals in 35 different states informed me that they did not make annual reports of this nature. However, 93 usable annual reports were received from high-school principals in towns and cities of 24 different states.

General Features of Annual Reports

These 93 high-school principals' annual reports were from both junior and senior high schools. In fact, 75 of them were received from six-year, four-year, and three-year high schools, and the remaining 18 from three-year junior high schools. All of these reports had been made within the past five years.

It was interesting to note that 65 of the annual reports were from high schools having enrollments from 225 to 4,129 students (six-year high school). The enrollments were not given in the other 28 reports. The majority of these 65 reports were from high schools having an enrollment between 900 and 1,500 pupils. More reports were received from high schools having enrollments ranging from 225 to 900, than from high schools having enrollments ranging from 1,500 to 4,129.

High-school principals in the eastern and central states placed more emphasis upon this type of report than in any other sections of the United States. In fact, principals in Maine, Pennsylvania, Illinois, New Hampshire, Wisconsin, Indiana, Massachusetts, and New Jersey contributed 15, 12, 11, 5, 5, 4, 3, and 3 reports, respectively.

Of the 93 reports, 54 were formulated and presented to the superintendent and board of education in the month of June; 13 in July; 11 in January; 5 in March; 4 in May; 2 in each of the months of April and December; and 1 in each of the months of February and August. None of the principals formulated annual reports in the months of September, October, and November.

The Public Use of Reports

The 93 principals were in agreement that the annual report should inform the public, as well as the superintendent and the board of education, concerning the achievements within the school during the past year, the success, or failure of a new procedure used in the school, the problems confronted during the school year, and the recommendations for the ensuing year.

Furthermore, the principals prepared their annual reports in sentence-paragraph form. Most of the materials were presented in concrete and specific terms in order that persons of all levels and walks of life might understand the educational report. Although the reports were in essay form, 86 of them contained figures occasionally in order that certain facts might be emphasized, such as summary of enrollment, number of graduates, frequency of faculty meetings, number of tuition students, etc.

Of the total number of reports studied, 59 were printed; 19 typed; 10 mimeographed; and, 5 hectographed.

In preparing these reports, the principals employed two distinct methods. In one method, the principal assumed the complete responsibility for collecting and compiling the materials used in the report. In the other method, the principal merely compiled and organized his annual report upon the basis of the factual information furnished him by the heads of the various departments and teachers within the school. The majority of the principals employed the former method.

Analysis of Annual Reports

After determining these general characteristics of the annual reports, a thorough analysis was made of each one from the standpoint of the items, or subjects reported. The frequency of each item was checked. The items in the 18 reports received from three-year junior high schools were tabulated with the items in the other 75 reports obtained from six-year high schools, four-year senior high schools, and three-year senior high schools.

It should be noted at this point, that the majority of the reports failed to contain headings, or subheadings for the subjects discussed, which meant that the specific items reported, were of necessity taken from the content of the materials. This partially accounts for the fact that a total of 125 different subjects were contained in the 93 annual reports. The frequency of only 94 items is revealed in Table I. The remaining 31 items were of minor importance, for each one was reported only one time.

TABLE I. FREQUENCY OF SPECIFIC ITEMS IN 93 HIGH-SCHOOL PRINCIPALS' ANNUAL REPORTS TO SUPERINTENDENTS AND BOARDS OF EDUCATION

Item	*Frequency*
1. Enrollment Summary	65
2. Department Achievements within the School	44
3. General Review of Athletics for the School Year	34
4. High-School Clubs and other Student Organizations	33
5. Physical Education and Health Program	31
6. Honors Awarded the School in Contests	30
7. Library Activities, e.g., Coöperation with Public Library	30
8. Music Organizations, e.g., Band, Orchestra, Glee Clubs	29
9. Attendance Summary	27
10. Number of Graduates	27
11. Student-Assembly Programs	25
12. Guidance Activities	25
13. Professional Attitude of Faculty	24
14. Recommendations and Plans for Next School Year	22
15. School Paper	19
16. Follow-Up Work of Former Graduates	18
17. Failures, e.g., number, per cent of, etc	18
18. Testing Program	17
19. Special Activities of Students, e.g., Model Assembly of League of Nations	16
20. Awards to Pupils	15
21. Dramatics and Debating	15
22. Faculty Records, e.g., training, activities directed, etc.	14
23. School Annual	13
24. Supervision	13
25. Cafeteria Activities, e.g., success or failure of, etc	12
26. Financial Report of Activities	12
27. Curriculum Adjustment	12
28. Tuition Pupils, e.g., numbers, cost, etc	11
29. Organization and Administrative Control	11
30. Student Morale	11
31. Housing Problems	10
32. P. T. A. Activities	10
33. Students on the Honor Roll	9
34. Faculty Meetings	9
35. Scholarships for Higher Institutions	9
36. Aims of the School	8
37. Banking within the School	8
38. School Magazines	8
39. Visual Education	8
40. Depression	8
41. Appreciation to Board of Education and Superintendent	8
42. Textbooks Used in the High School	7
43. Schedule of Recitations	7
44. Teacher Turnover	7
45. Progress Reports	6
46. Student Government	6
47. Student Military Training	6

Reported Five Times — 48. Athletic Expenditures and Income; 49. Investigations and Surveys (Research); 50. Pay Assemblies; 51. Session Rooms; 52. Commencements; 53. Employment Bureau for Students.

Reported Four Times — 54. Cost of Operation; 55. Buildings and Grounds; 56. New Textbooks; 57. Pupil-Load Information; 58. Withdrawal Reports; 59. Occupancy of New Building; 60. Transfer of Pupils to Other Schools; 61. Teaching Methods.

Reported Three Times — 62. Children Requiring Special Education; 63. Cost of Instruction; 64. Improved Office Records; 65. School Exhibits; 66. Classification of Pupils, e.g., ability grouping; 67. Interest of Pupils, e.g., radio receptions; 68. Senior Class Play; 69. Gifts to School, e.g., by Senior Class.

Reported Two Times — 70. Christmas Activities; 71. History of the School; 72. Ranking of the Graduates; 73. Annual Cost per Capita; 74. Negro Children; 75. Perfect Attendance (Student Honored); 76. Salaries of Teachers; 77. Secondary School Classification; 78. Size of Classes; 79. Season Tickets for Activities of the School; 80. By-products of the School Instruction; 81. Lesson Assignments; 82. List of Cases where Influences Affected the Pupil; 83. School Handbook; 84. Secret Societies; 85. Practice Teachers; 86. Teachers' Suggestions and Criticisms; 87. Swimming Pool; 88. Teaching Pupils How to Study; 89. Bulletins for the Faculty; 90. Graphic Illustrations; 91. Teacher Committees; 92. Noon-Hour Activity Program; 93. Extension-Work Students; 94. Special Classes.

ITEM	Frequency in Group I				Frequency in Group II				Frequency in Group III			
	1	2	3	NC	1	2	3	NC	1	2	3	NC
1. Attendance Summary	40	13	1	2	90	4	1	2	90	11	3	0
2. Awards to Pupils	15	32	7	2	13	56	19	9	11	66	18	9
3. Cafeteria Activities	10	40	2	4	33	41	13	10	39	38	11	16
4. Clubs and other Student Organizations	7	36	11	2	21	62	11	3	22	55	17	10
5. Curriculum Adjustments	25	25	5	1	81	9	3	4	67	25	7	5
6. Departments of School	12	34	8	2	51	32	6	8	46	36	11	11
7. Dramatics and Debating	6	34	12	4	20	66	11	0	6	70	19	9
8. Enrollment Summary	39	14	2	1	84	11	0	2	89	12	0	3
9. Faculty Meetings	6	39	8	3	20	55	19	3	21	57	19	7
10. Faculty Records	23	21	10	2	60	21	12	4	64	23	10	7
11. Failures (Pupil)	26	27	1	2	67	25	3	2	40	53	5	6
12. Financial Report of Activities	29	23	2	2	74	19	2	2	67	32	4	1
13. Former Graduates	12	35	7	2	14	62	18	3	2	62	31	9
14. Guidance Activities	20	28	6	2	33	58	4	2	30	56	11	7
15. Honors Awarded School	14	34	6	2	28	57	10	2	26	65	6	7
16. Honor Roll	14	29	10	3	16	54	21	6	11	68	19	6
17. Housing Problems	41	13	1	1	74	15	5	3	79	16	5	5
18. Library Activities	10	40	3	3	39	51	4	3	34	55	7	8
19. Music Organizations	3	40	11	2	26	62	8	1	24	62	12	6
20. Number of Graduates	37	17	0	2	77	18	0	2	82	18	0	4
21. Organization and Administrative Control	32	23	0	1	66	24	4	3	63	27	6	8
22. Physical Education and Health Program	25	21	8	2	54	37	4	2	48	47	4	5
23. P-T-A Activities	6	37	10	3	21	52	21	3	11	59	25	9
24. Professional Attitude of Faculty	11	38	4	3	51	30	12	4	50	42	8	4
25. Recommendations for Next School Year	42	13	0	1	90	5	0	2	94	6	2	2
26. Review of Athletics	6	37	10	3	21	57	18	1	16	68	15	5
27. Scholarships Available	7	39	8	2	28	50	14	5	19	59	16	10
28. School Paper	4	37	13	2	16	62	17	2	17	57	23	7
29. School Annual	2	39	12	3	14	55	19	9	11	58	24	11
30. Special Activities	1	38	15	2	7	58	23	9	7	62	23	12
31. Student Assembly Programs	1	37	17	1	11	56	27	3	10	54	34	6
32. Student Morale	17	32	5	2	32	48	13	4	32	41	20	11
33. Supervision	35	20	2	1	64	23	5	5	60	27	6	10
34. Testing Program	24	28	3	1	60	32	4	1	48	42	7	7
35. Tuition Students	35	19	0	2	76	12	2	7	89	7	3	5

TABLE II. Comparison of the Ratings of Thirty-five Items Reported Most Frequently in High-School Principals' Annual Reports by Three Different Groups of School Administrators.[a]

[a]Column 1 —"Item necessary."
Column 2 —"Item desirable, but not necessary."
Column 3 —"Item undesirable."
Column NC—"Item not checked."

Of the complete spread of subjects reported, more than one half appeared three or less times. Enrollment summary was the only item reported more than fifty times. Twelve items were reported 25 or more times; 21 items were

reported 15 or more times; and, 35 items were reported 9 or more times. These frequencies indicated that the majority of subjects found in the annual reports were applicable to only a small number of the 93 high schools.

Ratings of Items Reported Most Frequently

There was no complete uniformity and unanimity in subjects reported in the annual reports, so I attempted to find out the importance of each of the 35 items reported most frequently. This, I hoped, would help me to determine with some degree of accuracy the items to include in annual report.

Table II, therefore, presents the ratings of each of the 35 items by each of three groups of school administrators. Group I included the superintendents from whose school systems reports had been received; Group II included the superintendents chosen at random from different school systems in the United States and exclusive of Group I; and, Group III included principals chosen at random from different high schools in the United States. Fifty-six superintendents in Group I; 97 superintendents in Group II; and, 104 principals in Group III rated the items.

It was an evident fact that the three groups of school administrators, in general, regarded all of the 35 items to be either "necessary" or "desirable but not necessary," in an annual report. They considered Attendance Summary, Enrollment Summary, Faculty Records, Financial Report of Activities, Housing Problems, Number of Graduates, Organization and Administrative Control, Professional Attitude of Faculty, Recommendations for the Next School Year, Supervision, Testing Program, and Tuition Students, to be the "necessary" items in a high-school principal's annual report.

Purposes or Functions of Annual Reports

It appears to me that the principal should not be content with knowing only the general items to include in his annual report. Certainly the purposes or functions of the report, will have a direct bearing upon its formulation. In my opinion, an annual report of this nature has at least five purposes or functions.

First, annual reports in the business world help to develop good will, by pointing out for the members of the firm, or public, certain achievements, needs, new policies, and unique features of the organization. In the educational world, the high-school principal's annual report has an opportunity to serve this same purpose. This may be termed the public-relations purpose of the report.

Second, a new principal in a high school would be able to adjust himself to the position more readily, if some reference could be made to the policies of the school as they existed in the past, if accurate information could be obtained concerning the plant, if factual information were given concerning the former activities within the school, and if the definite plans for the ensuing school year were understood.

Third, the formulation of an annual report is a means of stimulating the principal to "continually check upon" the curricular and extracurricular activities within his high school.

Fourth, the members of the teaching staff would have access to factual information concerning the curricular and extracurricular activities within the school, which would aid to some degree in the development of greater instructional efficiency.

Fifth, if the principal of every high school should make an annual report each year, there would develop a historical value in the procedure. In other words, annual reports over a long period of years should provide an accurate history of the high school, and thereby, better enable the principal to direct and achieve his policies and functions.

MR. A. S. NIBECKER, JR.,
Chief, Division of School Architecture,
Board of Education,
Los Angeles, California

Mr. A. S. Nibecker, Jr., who has been associated with the Los Angeles board of education for the past eight years as chief of the Division of School Architecture, has been honored recently by appointment to membership of the Committee on School Architecture of the American Institute of Architects. He has also been made advisory architect for the Sierra Regional Council, of the Council on School Architecture. The latter appointment was made by Dr. William John Cooper, United States Commissioner of Education.

Mr. Nibecker is a native of Los Angeles, where he received his education. He is a graduate of the Massachusetts Institute of Technology, specializing in the subject of architectural design. After association with a number of leading architectural organizations during his junior years, he began the independent practice of his profession.

Mr. Nibecker is well known among school authorities and architects through his work as a designer of buildings for the Los Angeles board of education.

Recommendations for the Content and Form of a Principal's Report

The following suggestions appear to have practical values in the formulation of the high-school principal's annual report to the superintendent and board of education.

1. The month of June — immediately after the closing of the school year — is the logical month in which to formulate this type of annual report. At this time the principal should be better able to give a complete résumé of the school's life with facts vividly in mind.

2. Every principal should recognize the fact, that the main purpose of this type of report is to acquaint the superintendent, board of education, and public with the high school and its activities, accomplishments, or failures, problems, and needs.

3. The number and nature of the items reported will vary with the size, type, location, and administration of the school. Regardless of this fact, the principal should consider the following subjects "necessary" in his report: Attendance Summary, Curriculum Adjustments, Departments within the School, Enrollment Summary, Faculty Records, Financial Report of Activities, Housing Problems, Number of Graduates, Organization and Administrative Control, Professional Attitude of Faculty, Recommendations for Next School Year, Supervision, Testing Program, and Tuition Students. Furthermore, it would be "desirable, but not necessary," to include in his report, Awards to Pupils, Cafeteria Activities, Clubs and other Organizations, Dramatics and Debating, Faculty Meetings, Failures, Former Graduates, Guidance Activities, Music Organizations, P.T.A. Activities, Review of Athletics, Scholarships Available, School Paper, School Annual, Special Activities of the Student Body, Student Assembly Programs, and Student Morale.

4. The sentence-paragraph form is the most practical arrangement. If the public, as well as the school officials are to profit by the report, certainly it must be written in simple diction and concrete statements. The principal, therefore, should employ as nearly as possible the narrative form for his annual report. The report should have a definite organization and contain distinct headings for each subject or item.

5. The best method of formulating an annual report of this nature would be to have each department head within the school submit a review of the curricular and extracurricular activities for that particular department. The principal should compile the results, and make additions and changes.

6. The cost and uses to be made of the report are the main factors in determining whether the report should be printed, typewritten, hectographed, or mimeographed. However, the most economical and serviceable type of an annual report would be a mimeographed one, for copies might be distributed to the patrons of the school or other interested individuals as well as the school officials, at a nominal cost.

How Tangipahoa Parish Makes Good Citizens of its Foreign-Born Children

Superintendent T. B. Pugh. Jr.

The little town of Independence in Tangipahoa parish is located in the heart of the strawberry and trucking section of Louisiana and boasts of a population of 1,700 persons, a large number of whom are Italians.

The land which was formerly composed of pine forests is now given over to the cultivation of strawberries, which are shipped to all of the important markets of the United States and Canada.

A great many of these Italians have taken advantage of our naturalization laws and are now American citizens. The Italian has wonderful ability, and when this is developed through education and environment, he makes a splendid and useful citizen.

Of the 200 students in the high-school department of the Independence school about 65 per cent are of foreign descent. Of these parents about 60 per cent are unable to read or write the English language. Of the 150 in the first grade of the school, 130 are children of foreign-born parents, 50 per cent of whose parents are unable to read or write. The children come from homes where English is rarely spoken.

A decade ago, these children rarely remained in school more than three or four years. It was a rare sight to see a girl of Italian parentage above the fourth grade. The enrollment of the third grade was about three times that of the fourth grade. Today the fifth grade has an enrollment equal to that of the third. In the high school today one will see a large number of girls of foreign parents, some of whom are doing excellent work in the senior class. It has been difficult to instill into the minds of these parents the necessity of their girls receiving a high-school education. These parents now realize that on the American woman rests the responsibility of the home, and that their daughters deserve the best. In the home-economics work, these girls are taught sewing, cooking, and household management.

The present seventh grade now numbers 60, three times the enrollment of the entire high school ten years ago. Forty-five of these are children of Italian parents.

To suit the needs of the community, school begins in early July, and is not in session during the berry season. During this time, the smaller

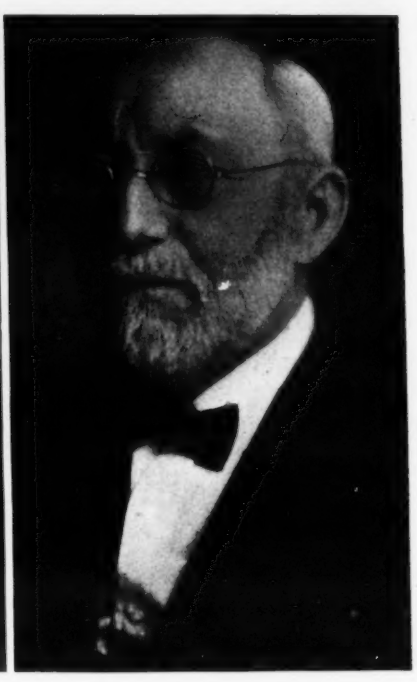
(Concluded on Page 78)

School-Board Heads Who are Making History in American Education

MR. CLARK T. SHIRK
President, Board of Education,
Lebanon, Pennsylvania.

MR. ALLEN S. PERKINS
President, Board of Education,
Watertown, New York.

MR. J. W. FARRER
President, Board of Education,
Provo, Utah.



DR. JOHN VANDERLAAN
President, Board of Education,
Muskegon, Michigan.

CLARK T. SHIRK
President, Board of Education, Lebanon, Pennsylvania

Mr. Clark T. Shirk has been a member of the board of education of Lebanon, Pa., since 1927, and has been president for the past year.

Mr. Shirk has made an important contribution to education in the establishment of an accounting system for the Lebanon city school system.

His policy has been economy without in any way interfering with the efficiency system and its services to children.

He is chief accountant for the Bethlehem Steel Corporation (Lebanon Plant) and has been engaged during the summer just past in special work for the company in California.

Mr. Shirk is active in all civic and community life, being treasurer of the Community Welfare Fund and treasurer of the Good Samaritan Hospital.

ALLEN S. PERKINS
President, Board of Education, Watertown, New York

Mr. Allen S. Perkins, president of the board of education, was born August 22, 1890.

He was educated in the public schools of his native city, being a member of the graduating class of 1909, Watertown high school. In 1919, he purchased a half interest in the Black River Paper Company and at that time became secretary and treasurer of the corporation. Two years later, he became sole owner of the business, and has since served as president. This company is one of the largest wholesale paper houses in northern New York.

Mr. Perkins was appointed in January, 1928, to fill the unexpired term of one of the members of the board of education. In 1928, he was reappointed a member of the board for five years. He was elected president May 10, 1932.

Although Mr. Perkins has the many interests of his own business to look after, he has nevertheless given a great deal of time and energy to the affairs of the board of education. During the first three years of his term, he served as chairman of the finance committee, during the fourth year as chairman of the teachers' committee, and for the fifth year he is president of the board.

Mr. Perkins is active in civic, religious, and commercial organizations of the city and is especially interested in movements which contribute to the welfare of youth.

DR. JOHN VANDERLAAN
President, Board of Education, Muskegon, Michigan

Dr. John VanderLaan, recently reëlected president of the board of education at Muskegon, Michigan, has been a member of the board for the past 39 years. He starts his eighteenth year as president of the board this fall.

Dr. VanderLaan was born in Holland in 1857, and came to Muskegon at the age of 16 years. After graduating from Hope College, he entered the medical school of the University of Michigan, graduating in 1880. He has been a practicing physician in the city since that time.

Dr. VanderLaan has been a powerful factor in the educational development of Muskegon. His influence has been felt by many school administrations. He not only directed the education of his own son, but many others through his benefactions have been put through high school and university and have had with him a permanent home.

It was through the untiring efforts of Dr. VanderLaan that Muskegon Junior College was organized in Muskegon. Many fine grade buildings, too, are serving successive groups of boys and girls, because of his fine vision regarding Muskegon's educational possibilities.

The contribution made by leaders in the field of school administration was never more intense and at the same time more gratifying than it is at the present time. Those who head the board of education, though, are usually identified in an intimate way with the economic, civic, and social activities of their respective communities.

Thus, they are also exposed to the influences which at times batter their opposition to the cause of popular education in the guise of economy and retrenchments which are retrogressive in spirit and harmful in fact. The country must, in the stress and storm of a disturbed condition, look to these leaders for that calm steadfastness and guidance so essential to the school administrative service.

The biographical sketches here presented were in every instance prepared by writers who were in close contact with their subjects. They have lifted into view the true merits of the persons here discussed and thus provided a series of character studies well worthy the attention of the American school public.

JOHN W. FARRER
President, Board of Education, Provo, Utah

John W. Farrer has served as a member of the Provo board of education for 32 years. This continuous service in the cause of education is probably a record in the western states. While making this record, Mr. Farrer has taken his part in every important educational movement which has affected the community.

He has seen the budget grow from approximately twenty-five thousand dollars annually to a quarter of a million dollars for the same period. He has seen the school plant grow from two or three small ungraded elementary schools to four large elementary schools, two large junior high schools, and one large central high school. He has helped to promote the change in school organization from the original eight grades to the 8-2, the 8-4, the 6-2-4, the 6-3-3 plan in turn, as the respective philosophies have established themselves. He has watched the teaching load decrease from 55 and 60 to 20 and then rebound to 40 and 45, as the economic structure of the country has been reflected in classroom method.

He has watched the disastrous educational effects of epidemic following epidemic. And, he has helped in the campaign to guard the health of the child and the community and prevent epidemics so destructive of educational progress through a carefully planned health program provided through the schools. The story of his service in the Provo schools is a reflection of the history of education in Utah.

Through each of the 32 years of service, Mr. Farrer has been unassuming and retiring; rendering his service and then retreating to his own private business as a dry-goods merchant. For the 32 years it has been his dream to see the day come when to each child would be given according to *his* own interests and capabilities for the promotion of *his* own welfare. Because of his unselfish service in the promotion of an ideal he has lived to see one of the best schools of the city named for him and to hear the oft-repeated slogan, "A Farrer student is fair, honest, and scholarly."

New Sources of School Revenue and Tax Reduction for Real Property—The Income Tax

H. H. Davis, Columbus, Ohio

Two of the most important problems before the American people now are those of finding ways to reduce property tax and of finding means of adequate and stable school support. The most satisfactory solution of these two problems involves the use of new sources of tax support for public enterprises in general and education in particular.

Of all the taxes which have been used or are being used to support education, that on income is perhaps the most logical. Individuals who possess greater amounts of education are thereby enabled to earn more money, and the security of these earnings in turn is dependent largely on the education of the rest of society. Education is an intangible asset not liable to taxation as property, yet in a modern world it is essential to profitable operation of most property. The large corporations in normal times take from the graduating classes of our schools and colleges annually the most promising members. The ability and training of these people produce large earnings for the corporations and substantial salaries for themselves. One rural-school district near a city reports a resident who works for a company in the city and commutes daily from his home in the country. This man's salary is $50,000 a year. His ability to pay tax is equal to the combined ability of a score or more of his farmer neighbors, yet he pays only a fraction of the tax they pay, for he rents his home and owns little taxable property. The majority of the directors and other key men in our large corporations are well educated. It is true that some people with large natural ability succeed with little education, but in most cases the admittedly important native ability has been greatly sharpened and directed by liberal applications of schooling. Furthermore, these major beneficiaries of school training tend to move about freely and take with them the asset created at public expense in the schools. Income taxes on state and national basis furnish the best and most direct way of using the product of such assets created by schools to produce revenues for schools.

Beginnings of Income Tax

Historical. Income taxes have had a rather long history in Europe and have been used to some extent in America since colonial days. The colonies called this a faculty tax and based it on income gained in excess of rates for common labor. This excess income was supposed to be due to special abilities or training and was mentioned as arising from the "pursuit of any faculty or profession." Not until 1821 were these designated as income taxes. Massachusetts, Virginia, and North Carolina all experimented with income taxes in the first half of the nineteenth century and some others in the latter half, but it was left to the twentieth century to make really effective use of this form of tax. Wisconsin in 1911 started this successful use, and the reason for the success seems to have rested largely on the improved and centralized administration there.

Theory. The theory of the income tax is very simple. It assumes that income received indicates ability to pay taxes. Thus it is classed among those taxes which are based on "ability to pay" as contrasted with those based on "benefit received." Some objection is raised against the tax on the ground that it penalizes success. A man who operates his property with energy and brains pays while his neighbor with similar property but less care and energy pays nothing. Since state income taxes rarely take more than 6 per cent of even large incomes there seems to be little cause for worry on this ground.

This is the second article in an important series by Dr. Davis. A further paper will appear in December.—The Editor.

Putting Burden Where Least Felt

The relationship between tax and income is not entirely simple and direct. Some consideration is given to the personal obligations of the individuals taxed. A man with wife and children dependent upon him for support has less taxpaying ability than a single man with the same income but with no dependents. It is usually considered, too, that ability to pay taxes increases at a rate greater than that of this increase of income. A man with $10,000 income is thought to have more than twice the taxpaying ability of one with a $5,000 income, other things being equal. Some tax authorities feel that incomes derived from investments, royalties, or like sources should pay a higher tax than those in the form of salaries or wages. This is based on the thought that such increases are more certain than those dependent on the earning power of an individual, and therefore subject to decline as his powers wane. The income tax is relatively simple to administer and the cost of such administration usually runs only about 2 per cent. Some states manage to keep the cost of collection as low as 1 per cent or even a little less.

Features of Income Taxes in States

Income taxes are now in use in about one third of our states. Some tax personal incomes only, some limit this tax to corporate incomes, and some tax both. The common exemptions allowed are $1,000 or $1,500 for single persons, although two states allow less than $1,000 and one allows more than $1,500. The common exemption allowed a married couple is $2,000 or $2,500, but there is less uniformity of practice here. Several states allow $3,500. The allowance for each child or other dependent is usually either $200 or $400. Children are considered dependent up to 18 years in most cases, and the rest count them as dependent to 21 years of age.

Wisconsin is an exception to all the exemption figures because it exempts in terms of tax paid instead of income. A minimum of $8 tax is exempted for a single person and others in proportion. In addition to these general exemptions there are various special ones. Income from federal sources, either salaries or bond interest, is exempt, of course, by the provisions of the Constitution of the United States. Proceeds of life insurance are commonly exempt, but salaries paid by the state or its subdivisions are usually not exempt. Items which are usually *not* exempt include living expenses (the specific cash exemption is supposed to cover this) payment for property improvements, life-insurance premiums, and taxes or special assessments for local improvements tending to increase the value of property.

Personal income taxes are usually at graduated rates. The first bracket (e.g., the first $1,000 of income above exemptions) is usually taxed 1 per cent, the next bracket 2 per cent, and so on, until a maximum of 4, 5, or 6 per cent is reached. Frequently the graduation is in fractions of 1 per cent. Utah, for example, taxes the first bracket 1 per cent, the next 1¼ per cent, then 1½, 1¾, 2, 2½, 3, 3½, and 4 on successive brackets. The size of the brackets varies so much as to defy general classification —$1,000, $2,500, $3,000, or $5,000 are common sizes in lower brackets. Higher brackets often run $10,000 or more. Corporation taxes are usually not graduated but set at a comparatively low flat rate.

How Schools Share

Use for schools. Several states use income taxes directly for school revenue, others put the proceeds into state general funds from which school aid as other aids and costs are paid.

The Arkansas tax is one example of the first type, since $750,000 of its annual proceeds is set aside for the state educational equalization fund. The tax is at a flat rate of 2 per cent for corporate incomes. The personal income provisions are much more complex. Both residents and nonresidents are taxed, and there are the common exemptions of insurance proceeds, income from the United States Government, interest on obligations of the state or its subsidiaries and compensation for accidents, sickness, etc. Residents are taxed on income from all sources and nonresidents on income derived from sources in Arkansas. An exemption of $1,500 is allowed to single persons and $2,500 to married couples. A further exemption of $400 is allowed for each dependent, including children under 18 years of age. The rate is 1 per cent on the first $3,000 of taxable income, 2 per cent on the next $2,000, 3 per cent on the next $5,000, and 4 per cent on the next $14,000, and 5 per cent on all amounts in excess of $25,000. Returns are made to the State Commissioner of Revenue on or before May 15, and half of the tax is paid at that time. The other half is paid six months later. The features of the Arkansas law are given much detail in this because they illustrate what have come to be almost "standard provisions" of state income taxes.

Delaware and Massachusetts Laws

Delaware also devotes its income-tax proceeds to public-school support. The Delaware law differs from that of Arkansas, in that it does not tax nonresidents or corporations. Its exemptions for single persons, married couples, and dependents are $1,000, $2,000, and $200 instead of $1,500, $2,500, and $400. The rates are 1, 2, and 3 per cent on the successive brackets of $3,000, $7,000 and all in excess of $10,000, and taxes are paid quarterly instead of semiannually. These differences are evidently merely variations of the "standard provisions." For the calendar year ending December 31, 1930, the yield of the tax was $2,388,630.

Another state, or more accurately a commonwealth, which devotes income-tax money to education is Massachusetts. Because its law differs rather widely from the other two examples it should be given some space here. This law taxes three major types of incomes; dividends and interest on stocks, bonds, mortgages or other intangibles; income from annuities, professions, trade and business; and profits from purchases or sales of intangible personal property. The first group is taxed at 6 per cent, the second group at 1½ per cent, and the third at 3 per cent.

Personal exemptions are allowed from the income "derived from professions, employments, trade, or business" to the extent of $2,000 for a single person, $2,500 for a married couple and $250 for each dependent. In addition to the usual exemptions of income from the Federal Government, etc., there are numerous special exemptions concerning intangibles both as to income and trade which need not be recorded here.

According to the annual report of the Massachusetts Commissioner of Corporations and

(Concluded on Page 72)

School Enrollment Grows in 1932

The figures in the present tabulation have been collected by the Research Department of the AMERICAN SCHOOL BOARD JOURNAL from information provided by city superintendents of schools. It indicates that in 250 cities of the United States the elementary school enrollment dropped —1 per cent, but the junior- and senior-high-school enrollment rose 5.5 per cent and the total enrollment in all day-schools including junior colleges, vocational schools, and special schools as well as elementary and secondary schools, rose 2.3 per cent.

ENROLLMENT IN CITY SCHOOL SYSTEMS, SEPTEMBER, 1932

	Elem. Schools	*% Gain*	*High Schools*	*% Gain*	*All Day Schools*	*% Gain*
ALABAMA						
Birmingham	37,601	—	9,673	—1	47,272	—
ARIZONA						
Tucson	7,091	4	3,289	6	10,380	5
CALIFORNIA						
Alameda	4,420	—1	2,288	5	6,708	...
Alhambra	5,608	5	3,269	9	9,053	6
Berkeley	6,764	—6	5,813	3	12,978	...
Fresno	7,308	—5	6,002	3	13,435	—2
Glendale	7,466	—2	6,178	8	13,644	2
Los Angeles	155,099	6	98,136	8	259,118	9
Oakland	23,827	—3	26,712	2	50,539	...
Riverside	3,577	—3	2,876	...	6,453	—1
San Bernardino	4,848	—3	3,716	5	8,564	...
San Jose	6,155	1	5,031	6	11,186	3
COLORADO						
Colorado Springs	3,621	—2	3,085	3	6,706	...
Denver	27,839	...	18,984	5	46,823	2
Pueblo	2,517	—2	1,824	4	4,341	...
CONNECTICUT						
Bridgeport	18,114	...	8,642	10	26,756	2
Bristol	4,278	...	1,301	15	6,999	2
Greenwich	4,660	...	1,160	14	5,820	3
New Britain	8,503	—2	5,928	8	14,431	2
New Haven	23,866	—3	12,151	9	36,017	...
Norwalk	3,757	1	2,344	—2	6,101	...
Torrington	3,752	...	1,217	8	4,969	2
DELAWARE						
Wilmington	9,198	—2	7,800	8	16,998	2
GEORGIA						
Atlanta	22,790	—3	13,019	5	36,984	...
Columbus	5,388	1	1,495	4	6,883	2
Macon	11,701	3	3,187	6	14,888	4
Savannah	6,469	...	3,749	3	10,218	1
INDIANA						
Anderson	4,544	—3	2,967	6	7,611	2
East Chicago	6,132	—3	4,360	9	10,502	3
Evansville	10,341	...	4,109	2	14,450	...
Fort Wayne	5,005	—1	11,622	4	16,627	2
Gary	14,476	—2	4,878	4	19,354	...
Indianapolis	41,366	—2	14,306	4	55,672	...
Kokomo	4,951	2	1,547	9	6,498	3
Michigan City	2,476	1	1,696	5	4,172	1
Muncie	5,404	...	3,388	1	8,792	2
Richmond	3,569	2	2,169	3	5,738	2
South Bend	10,102	—1	6,726	...	16,828	...
Terre Haute	6,810	11	4,488	3	11,298	8
ILLINOIS						
Alton	3,903	1	2,150	9	6,053	4
Aurora (East)	3,308	...	1,459	7	5,005	...
Aurora (West)	1,988	...	818	13	2,806	3
Berwyn No. 98	2,196	—3	539	7	2,735	—1
Berwyn No. 100	3,030	—3	....	...	3,030	...
Bloomington	3,345	—1	1,251	8	4,596	1
Chicago	381,339	—4	145,347	11	547,057	...
Chicago Heights	2,390	—6	2,060	—5	4,450	—5
Cicero	5,941	—8	No figures given		5,941	No figures given
Danville	6,069	...	1,842	5	7,911	...
Decatur	6,094	—3	4,631	3	10,725	...
East St. Louis	8,863	...	4,730	4	13,593	1
Elgin	3,762	—2	1,625	3	5,387	...
Evanston No. 76	2,045	—4	915	5	2,960	—1
Galesburg	2,798	—5	2,378	6	5,176	...
Joliet	5,448	—1	4,715	8	10,163	3
Moline	2,976	—3	2,331	5	5,307	...
Maywood	4,220	1	....	...	4,220	...
Rockford	7,104	—1	6,209	4	14,134	1
Rock Island	3,099	1	2,426	3	5,525	2
Springfield	8,522	—2	3,334	6	11,856	...
Waukegan	4,260	—3	No figures given		4,260	No figures given
IOWA						
Burlington	2,859	...	1,870	2	4,729	...
Cedar Rapids	5,311	—1	4,336	1	9,647	...
Clinton	2,066	2	1,490	5	3,556	3
Davenport	5,324	—2	4,040	4	9,364	...
Des Moines	17,605	—1	12,462	3	30,067	...
Dubuque	2,147	—9	2,120	5	4,267	—2
Ottumwa	4,142	—1	1,690	...	5,832	—1
Sioux City	9,663	...	6,520	2	16,183	1
Waterloo (East)	2,710	—5	1,425	2	4,135	2
Waterloo (West)	2,421	—1	1,670	4	4,091	1
KANSAS						
Hutchinson	3,431	—3	2,509	3	6,350	...
Kansas City	14,739	...	8,202	6	22,941	2
Topeka	7,812	2	4,421	3	12,233	2
Wichita	12,623	—2	8,261	4	20,884	...
KENTUCKY						
Ashland	3,882	1	1,980	2	5,862	2
Louisville	26,773	—1	13,327	9	40,100	2
Newport	2,261	—3	1,241	13	3,502	2
Paducah	Not Open	...	597	1	597	...
MAINE						
Bangor	3,702	3	1,285	4	4,987	4
MARYLAND						
Cumberland	9,570	...	6,172	10	15,742	4
MASSACHUSETTS						
Arlington	3,544	—1	2,900	6	6,444	2
Beverly	3,115	...	1,526	2	4,641	...
Boston	103,426	2	29,466	1	132,892	2
Brockton	8,009	—1	3,188	6	11,197	...
Brookline	4,038	—5	1,793	4	5,831	—2
Chelsea	3,960	—5	3,840	—1	7,800	—3
Fall River	11,491	1	4,984	8	16,475	3
Fitchburg	3,459	1	1,987	6	5,446	3
Haverhill	5,980	—1	2,050	6	8,030	...
Holyoke	3,872	1	3,936	6	7,808	4
Lowell	8,447	3	6,190	12	14,637	7
Lynn	8,625	—2	7,880	2	16,505	...
Malden	5,132	...	4,300	2	9,432	1
Medford	6,316	—4	5,412	5	11,728	...
New Bedford	12,240	—3	5,081	10	17,321	...
Quincy	8,113	...	6,532	4	14,645	2
Revere	5,620	—2	2,359	27	7,979	6
Salem	4,272	...	1,663	4	5,935	1
Somerville	88,805	...	6,799	1	15,604	1
Springfield	14,011	—1	11,346	...	24,357	—1

ENROLLMENT IN CITY SCHOOL SYSTEMS, SEPTEMBER, 1932

	Elem. Schools	*% Gain*	*High Schools*	*% Gain*	*All Day Schools*	*% Gain*
Taunton	4,977	—1	1,818	8	6,795	1
Waltham	3,988	1	2,135	5	6,113	2
Worcester	25,683	...	9,505	9	35,188	2
MICHIGAN						
Battle Creek	5,168	—4	3,586	10	8,754	1
Bay City	5,217	7	3,344	10	8,561	8
Calumet	1,828	—10	1,209	10	3,037	—2
Dearborn	6,024	2	3,355	19	9,379	9
Detroit	164,284	1	78,631	4	257,848	2
Flint	18,195	—10	11,517	5	29,712	—1
Grand Rapids	15,862	...	12,192	6	28,054	3
Hamtramck	6,017	—5	6,027	11	12,044	3
Highland Park	4,233	—21	4,180	13	8,413	—6
Jackson	5,415	—3	4,499	2	9,914	—1
Kalamazoo	5,837	...	4,153	5	9,990	2
Lansing	8,975	—1	6,393	5	15,368	1
Muskegon	6,133	—3	3,338	8	9,471	...
Muskegon Heights	2,423	1	1,460	...	3,893	1
MINNESOTA						
Minneapolis	50,581	—3	33,316	6	83,897	...
St. Paul	25,562	—1	13,157	—5	38,719	—2
MISSISSIPPI						
Meridian	2,633	—1	1,597	...	4,230	...
MISSOURI						
Joplin	3,862	—13	2,664	—6	6,526	—12
Kansas City	43,072	2	17,691	—2	62,355	1
St. Joseph	7,190	—4	4,368	...	11,558	—1
St. Louis	80,194	—1	21,986	12	102,180	1
Springfield	6,601	1	4,448	4	11,426	2
University City	2,403	...	1,747	8	4,150	3
MONTANA						
Great Falls	2,909	—15	2,977	...	5,886	—8
NEBRASKA						
Lincoln	9,198	—1	7,037	2	16,235	...
Omaha	27,458	1	9,726	1	37,184	...
NEW HAMPSHIRE						
Concord	1,882	...	1,559	—1	3,441	—1
Nashua	2,180	...	2,163	10	4,343	4
NEW JERSEY						
Bayonne	10,430	—4	6,685	10	17,115	1
Belleville	4,677	...	1,165	15	5,842	2
Bloomfield	5,382	2	1,507	10	6,889	5
Clifton	7,960	1	1,885	16	9,845	4
East Orange	6,019	—3	2,921	5	8,940	—1
Elizabeth	10,495	—1	7,534	11	18,598	3
Garfield	5,979	—4	1,260	30	7,239	1
Hoboken	6,728	—2	2,894	7	9,622	...
Jersey City	33,082	—3	12,953	10	46,035	...
Montclair	4,333	3	3,272	8	7,505	4
Newark	61,519	...	15,312	12	76,831	1
New Brunswick	3,446	—4	3,059	12	6,505	3
Orange	5,159	3	1,250	—9	6,409	...
Passaic	9,625	...	2,425	8	12,050	1
Paterson	19,045	...	6,286	13	25,331	3
Perth Amboy	6,121	—1	2,109	1	8,230	2
Plainfield	5,191	...	1,748	12	6,939	3
Trenton	12,243	1	8,158	9	20,401	4
NEW YORK						
Albany	9,314	—11	4,905	40	14,219	5
Amsterdam	3,580	6	2,951	1	6,531	4
Binghamton	8,742	...	5,356	9	14,098	2
Buffalo	64,195	—5	20,025	10	84,220	—3
Jamestown	5,110	—1	4,017	7	9,127	2
Kingston	3,206	1	1,670	10	4,876	4
Newburgh	3,124	7	2,215	...	5,339	4
New Rochelle	5,555	5	3,960	6	9,515	5
New York	771,881	1	334,949	7	1,120,541	3
Niagara Falls	9,767	...	7,138	8	16,905	3
Rochester	31,902	—3	18,451	9	50,457	...
Schenectady	8,592	—6	8,369	3	16,961	—1
Troy	4,853	1	1,577	13	6,430	4
Watertown	3,622	...	2,576	7	6,198	3
White Plains	4,009	2	2,989	3	6,998	2
Yonkers	16,050	...	9,933	9	25,983	3
NORTH CAROLINA						
Charlotte	11,187	3	5,245	3	16,432	3
Durham	8,213	3	2,393	8	10,606	5
Greensboro	7,633	2	3,277	—3	10,910	...
Raleigh	6,873	2	1,924	...	8,797	1
Winston Salem	11,387	1	3,571	8	14,958	3
NORTH DAKOTA						
Fargo	2,669	—1	2,483	2	5,168	...
OKLAHOMA						
Enid	2,754	...	2,157	5	4,911	2
Muskogee	3,219	...	2,397	—7	5,616	—1
Oklahoma City	20,194	—2	12,047	5	32,231	...
OHIO						
Canton	14,035	—2	6,657	21	20,692	...
Cincinnati	38,572	...	17,295	8	55,867	2
Cleveland	84,111	—1	60,987	5	148,892	1
Cleveland Heights	4,871	—1	4,056	1	8,927	...
Dayton	19,959	—7	13,313	—1	33,271	—5
Elyria	3,328	—1	1,774	—1	5,102	—1
Garfield Heights	1,459	...	1,089	—5	2,548	—2
Hamilton	7,718	2	2,666	3	10,384	2
Lima	4,367	1	3,267	...	7,634	1
Lakewood	5,717	—2	4,945	2	10,662	...
Lorain	4,032	—6	4,168	3	8,200	—1
Mansfield	3,582	—5	2,537	6	6,119	—1
Marion	3,657	—4	2,470	6	6,127	...
Massillon	2,473	...	2,278	9	4,751	4
Middleton	3,590	...	2,515	3	6,105	1
Norwood	2,167	—3	1,623	6	3,790	2
Parma	2,082	—7	1,451	7	3,534	1
Springfield	7,269	—3	4,437	4	11,706	...
Steubenville	3,747	—5	2,432	4	6,179	—1
Toledo	32,434	—2	13,504	6	45,938	...
Warren	5,698	1	3,611	...	9,309	...
Zanesville	4,166	...	2,612	2	6,798	1
OREGON						
Portland	32,608	...	13,692	2	46,300	...
PENNSYLVANIA						
Altoona	9,851	...	6,700	4	16,551	1
Bethlehem	6,740	—4	4,622	11	11,362	1
Chester	6,812	—6	3,642	25	10,454	4

ENROLLMENT IN CITY SCHOOL SYSTEMS, SEPTEMBER, 1932

	Elem. Schools	% Gain	High Schools	% Gain	All Day Schools	% Gain
PENNSYLVANIA						
Erie	11,487	—1	9,099	8	20,586	2
Hazleton	4,418	—4	3,591	4	8,009	...
Lancaster	5,731	—4	3,803	5	9,534	—1
Lebanon	2,376	—5	2,265	7	4,641	...
McKeesport	7,573	—3	3,886	9	11,459	1
Nanticoke	4,089	—4	1,223	15	5,325	...
New Castle	5,466	—1	4,676	8	11,142	1
Norristown	3,593	1	2,852	10	6,445	5
Philadelphia	175,820	—9	86,049	6	261,869	—4
Pittsburgh	59,826	—3	36,526	12	96,352	2
Reading	10,966	...	7,207	6	18,173	2
Sharon	2,859	—5	2,570	7	5,429	...
Wilkes-Barre	12,345	—2	3,751	7	16,096	...
Williamsport	4,852	...	3,689	2	8,541	..
York	5,903	2	3,692	—1	9,865	...
RHODE ISLAND						
Central Falls	1,683	—4	1,171	9	2,854	—1
East Providence	4,101	—2	2,049	11	6,160	1
Newport	3,091	3	1,403	15	4,494	6
SOUTH CAROLINA						
Charleston	....	...	....	...	10,235	2
Columbia	4,689	...	2,764	4	1,453	1
Greenville	2,825	—7	1,855	—5	4,680	—14
TENNESSEE						
Nashville	....	...	....	...	18,675	4
TEXAS						
Beaumont	2,293	—7	2,420	...	4,713	—3
Corpus Christi	3,446	...	1,543	12	4,989	3
Dallas	32,716	—4	11,225	4	43,941	—1
El Paso	14,224	—2	3,596	...	18,363	—3
Houston	21,960	—3	16,397	7	38,357	1

ENROLLMENT IN CITY SCHOOL SYSTEMS, SEPTEMBER, 1932

	Elem. Schools	% Gain	High Schools	% Gain	All Day Schools	% Gain
Laredo	6,596	8	715	3	7,311	7
Port Arthur	4,449	—5	2,515	5	6,964	—1
San Antonio	23,491	2	12,904	8	36,395	4
Waco	5,582	...	3,440	3	9,022	1
Wichita Falls	5,053	—8	2,467	...	7,520	—5
UTAH						
Ogden	5,856	—2	3,638	10	9,494	2
Salt Lake City	4,494	2	3,046	9	7,540	5
VIRGINIA						
Lynchburg	6,721	...	1,803	3	8,524	1
Newport News	5,188	—3	1,555	4	6,743	—1
Norfolk	10,378	5	5,349	2	15,727	4
Petersburg	4,294	7	2,205	5	6,499	6
Richmond	13,533	1	8,625	3	22,227	...
Roanoke	10,001	—2	4,545	5	14,546	...
WASHINGTON						
Everett	3,085	—2	3,012	...	6,097	—1
Seattle	38,039	—3	22,791	4	60,833	...
Spokane	12,796	—4	6,620	3	19,416	—1
Tacoma	10,400	—1	9,431	5	19,831	1
WEST VIRGINIA						
Parkersburg	3,405	—3	2,850	3	6,255	...
WISCONSIN						
Appleton	2,359	5	1,949	5	4,308	2
Eau Claire	2,986	2	2,233	4	5,219	3
Fond du Lac	2,698	1	2,417	8	5,115	4
Kenosha	5,553	—1	4,195	4	9,748	1
La Crosse	3,186	12	2,563	2	5,749	8
Madison	5,739	7	4,633	4	10,372	7
Racine	7,036	—8	5,229	10	12,165	—1
West Allis	4,352	2	2,742	8	7,094	4

The Selection of Teachers for Classroom Instruction

J. D. Falls, Superintendent of Public Schools, Ashland, Kentucky

The selection of teachers for classroom instruction constitutes one of the important functions of a superintendent. "Selection" herein should be interpreted as meaning some of the important procedures one may follow in order to reach a decision and make recommendations of teachers to the board of education for formal employment. There is an adage as old as the organization of the schools themselves, to the effect that "as is the teacher so is the school." A corollary of this adage may be that *as is the method of selecting teachers so will be the teachers*. The chief purpose for the employment of teachers should be that the children of the community shall be efficiently served educationally. Perhaps there is no group of individuals in this country upon whom has fallen a greater responsibility than that of the teaching profession. Nearly one fourth of the total population of this nation is receiving instruction from teachers. There is no adequate device available by which teaching success and teaching efficiency can be measured accurately. Therefore, the selection of teachers evolves itself into a thorough study of the ability, traits, and character of each individual teacher before she is recommended, and tendered a contract.

The first step in the procedure of selecting teachers should be taken by the superintendent. He should acquaint himself with every possible local applicant. If individuals in the system desire promotions or transfers, they should have first consideration. If there are other applicants within the community who are specifically qualified to fill the positions, they should also be considered. In the event local teachers cannot meet the special requirements, the superintendent should next proceed to correspond with schools of higher learning that are preparing teachers to teach. It should be the policy of school officials to seek individuals to fill vacancies, rather than individuals to seek the positions.

The first objective to be reached in the selection of a teacher is to determine what subject or subjects she will teach. Then one should be selected who has these necessary qualifications. *Teachers should be employed to teach certain subjects rather than just to be employed and assigned subjects. That is, when selecting a teacher to teach history, she should not be employed and then later assigned the subject of history.*

Instructional Organization

The type of instructional organization of a school system is an important factor in determining the method of the selection of teachers. It is becoming a common practice in the secondary schools of this country to employ teachers to teach only one or two subjects. It is generally acknowledged that most teachers in the secondary schools are properly prepared to teach only one, two, or perhaps not more than three, subjects. The accrediting agencies of the secondary schools are recommending that teachers be employed to teach the subjects for which they are properly and professionally qualified. That is, teachers are being assigned certain subjects rather than certain grades containing many subjects. The grade assignment was the practice under the old lateral organization of the elementary schools, and until recently it was also the practice in the secondary schools. If this specialization is good for the secondary schools it is good for the elementary schools.

Information gained through interviewing several hundred teachers indicates that teachers are not properly qualified to teach well, more than two or three subjects in a grade in the elementary or secondary schools. This also reveals evidence that in the elementary as well as in the secondary schools, they have their choices and would rather teach one or two subjects, than to attempt to teach *all* of the subjects in one grade.

In view of the fact that teachers are better prepared to teach some subjects than others, it seems reasonable to conclude that they should not be assigned to the fourth, fifth, sixth, seventh, or eighth grades where they will have to teach *all* of the subjects, say, language, reading, history, arithmetic, geography, spelling, penmanship, health, and, perhaps, music and art. For some time superintendents have been assigning special teachers to music and art, but if the subjects are properly taught it takes just as much skill and special training to teach any of these other subjects as it does music and art. Why place special emphasis upon just one, two, or three subjects in a system? All subjects need special emphasis. It seems that the old lateral organization of subjects should be supplanted by the vertical.

By *lateral* it is meant that a teacher is assigned to a grade, teaching all or practically *all of the subjects in that grade*. By *vertical* it is meant that a school system is so organized that a teacher will teach part or all of *a subject* from the fourth to the eighth grade, such as arithmetic, or history, or geography, or the like. The vertical plan of subject organization can be inaugurated without additional teachers. If seven teachers can teach all of the subjects in seven sections, then one teacher can teach one subject occurring in seven sections. That is, if history is taught in all of the sections from the fourth to the eighth grade, then one or more teachers can teach all of the history; others, all of the geography; others, all of the arithmetic in these various grades. Then, too, this plan is more economical; for example, one room can be equipped with maps, globes, charts, and the like, for the teaching of geography or history, rather than attempting to equip partially, several rooms for this purpose. Modifications of this same vertical organization can be set up for the second and third grades, by assigning a teacher to a block or group of subjects, according to her training and choice, rather than requiring her to teach *all* of the subjects in the second or third grade. If the vertical organization is used throughout a system, in the elementary schools as well as the secondary, then teachers can be employed with specific qualifications to teach certain subjects for which they are qualified.

College Training

A teacher can no longer pursue the average academic curriculum for two, three, or even four years, and return to her community a well-trained teacher in the elementary schools. Such preparation may be splendid training for high-school teachers, but the colleges of education, and teachers' colleges, can better prepare for the special type of training necessary for teachers in the elementary schools. The teacher with her two or more years of training only in the academic subjects, with only a sufficient number of courses in education to constitute the state requirements for a certificate, is little better prepared to teach reading, spelling, geography, history, and other such elementary subjects, than she was when she left the high school. History of education, principles of secondary education, philosophy of education, and the like, may be splendid background subjects, but they seem to be of little value in aiding directly teachers to teach. It must be remembered that the teacher in the elementary schools needs training of a more technical nature in the subjects she is to teach than she has had formerly. She can *tell* pupils what *she* has been *told*, but everyone is aware that children will not *stay told*. The teacher must be taught *how* to teach.

The public schools are being flooded with poorly trained teachers. The higher institutions

often receive poorly trained students from our public schools. These students in turn often become poorly prepared teachers and go back into the public schools of the states to train more pupils poorly. *Thus the vicious circle in American education!* No superintendent can hope to raise the standards of his teaching personnel higher than the standards of the teacher-training institutions of this country. There should be an *esprit de corps* of the highest type of ethical standards, between the *trainers* of teachers and the *employers* of teachers. The code of ethics should be such that recommendations from the officials of institutions of higher learning should be accepted by school officials without question; and recommendations of superintendents or principals of applicants for admission in the institutions of higher learning, should be highly respected. Only the best should be recommended in either case.

Specific Preparation

This is a day of specialization. Very often teachers filling formal applications state that they have majored in foreign languages, or higher mathematics, or the sciences, but that they are "willing to teach *anything* in high school, or in the elementary schools" from the first grade to the eighth. This type of teacher just does not understand her function as a teacher. She lacks the proper conception of the aims and objectives of modern education. She is like the old-time cure-all family physician, who carried his own drug store in his saddle pockets, his operating room in his kit, and his dental offices in his pocket; and who presided over the health of the entire community. He had his day and blessings on him for the services that he rendered, but he is gone forever. The American people no longer want a man to take a course in pharmacy and become their family doctor, nor to read a text on anatomy and become their surgeon, nor to read a treatise on the "care of the teeth" and become their dentist. So is the teach-all type of teacher gone from the modern school. Teachers should no longer be employed to teach all of the subjects in any one of the upper grades. Teachers should be employed who can teach history, or geography, or spelling, or music, or art.

Application Forms

Each school system should have its own application form adapted to fit specifically the needs and purposes of the administrative organization and the rules and regulations of the local board of education. A general application form that may be purchased on the market for a very nominal fee, usually contains a lot of information that is of little value to school officials and seldom contains all of the important information that is needed in that particular school organization. An application form should be filed annually by each teacher in the system and these accumulative records kept on file in the office of the superintendent. These applications will show the progress of teachers in their training and preparation from year to year. Perhaps some of the most outstanding items that should be included in all application forms should be as follows:

1. The name of the position which the applicant is specifically qualified to fill.

2. If in the primary department, the grade or section of a grade that applicant is prepared to teach. (There is a great deal of difference in the training necessary to teach any one of the different grades in the primary department.)

3. The subject or subjects in the intermediate department that an applicant can teach best, listed in the order of preference; and again, in the order of special training. (It is just as important to know what subjects in the upper elementary grades one is prepared specifically to teach as it is to have this same information concerning high-school teachers. Not only should this information be sought but the application of it should be practiced.)

4. The name of the institution which the applicant has attended, giving dates of attendance, and number of semester hours earned. (It is as important for a superintendent to know *what* institution trains the teachers in his system, as it is to know the number of hours they have earned.)

5. A list of all subjects which the applicant has taken, as evidence of specific qualifications to teach the subjects for which she is applying; and *especially* all courses in education. (Every teacher should have had methods of, and practice teaching in, the subject she is to teach. General courses in education are not sufficient.)

6. The names and locations of the school systems wherein the applicant has been teaching; the number of years' experience, and also, the subjects taught or the position held and dates thereof. (When these data have been officially confirmed, they will serve in the operation of a salary schedule which includes training and experience as bases.)

7. Letters of recommendation should be obtained from school officials. (It is a natural thing for one to have only one's friends to recommend one. Therefore, the applicant should furnish as references, the names of superintendents and principals under whom she has taught; and then the superintendent should correspond directly with these school officials. The to-whom-it-is-concerned type of recommendation should have little or no weight.)

In addition to these important general items, the local application form should include all other items covering the rules and regulations that the board of education has adopted, pertaining to specific traits, qualities, and characteristics, necessary for a teacher to have before she may be elected by that board.

Other Credentials

Reference Form. In addition to this information, a reference report form should be sent to all of the school officials under whom or with whom the applicant has taught, calling for special information relative to character, professional attitude, teaching technique, pupil reaction in her classes, coöperation, classroom management, and the like. This form should be so arranged that these traits can be checked in rank-order columns of, say, superior, above average, average, below average, and unsatisfactory. Such a form will make all assembled information comparable.

Transcript of Credits. It is highly important that high-school and college transcripts be obtained for each teacher employed in the system, and kept on file in the office of the superintendent. These transcripts should be kept up to date by having colleges furnish supplementary transcripts for teachers when they take additional work. Perhaps the most important information which a superintendent may have in his files concerning a teacher is a transcript of the work she did while in high school and college.

Assignment of Teachers

Consultations with teachers concerning the practices among some school officials relative to the employment of teachers in many sections, indicate that teachers too often are *employed* and *then assigned* such subjects as may fall by chance to their lots. Many types of combinations of subjects are being assigned to teachers regardless of their specific training and their ability to teach them. For example, teachers of physical education may be assigned art, or penmanship, or mathematics, or the like, even though they have had little or no preparation to teach these subjects; or teachers who are trained in, say, the field of mathematics, may be assigned history, or geography, or art, or other nonrelated subjects. In too many cases, teachers prepare to teach one subject and are assigned other subjects for which they have had little or no professional preparation. Too often entire faculties are employed in the early spring, and are not given their assignments until the opening of school in the fall.

The Lay Attitude

Often the philosophy exists in the minds of the public as well as some school officials, that the schools are to furnish positions *for teachers*, rather than that teachers should be employed *to teach children*. It is often prevalent among the laymen to hear such expressions as: "Anybody can teach my child, she is just in the third grade" (or some other primary grade). Too often the taxpayer thinks that just *any* teacher can *teach*. If a vacancy occurs in the system, and a teacher wants employment, the average individual cannot understand why this teacher should not be employed at once. The idea of fitness for the position is often expressed as follows: "She is a splendid girl," or "I know her father," or "Her people were teachers," or "I am a taxpayer, therefore, my daughter should be employed." The local citizen who argues his inalienable rights by insisting on the employment of his daughter or his neighbor's daughter, seldom takes into consideration the rights of the 40 children whom she will teach, or the 80 parents of these children, who also have rights and privileges. It may be well for one to ask himself this question: Which is the more important, the wishes of one teacher, or the rights of these 120 people? *"Splendid people," "acquaintance," "relatives," "social heritage," "taxpayer's relations," "local or nonlocal," "married or single," are not necessarily qualifications for teachers.* What this country needs is teachers who can properly lead and instruct children, and not that children may be taught in order to furnish employment for teachers. If the American children could only appreciate fully the importance of their schooling, there would be tens of millions of hands uplifted, silently pleading that their future be better safeguarded, rather than that their privileges be sold for the political pottage of the older generation.

Teachers are servants of *all* the people, not pawns in the palms of potential politicians. The positions of the teachers of our children should be held sacred and inviolate, and the teachers themselves should never be driven to the economic status of indirectly purchasing positions from selfish school officials in whom the citizens have placed their trust. Definite salary scales based on certified training and experience would eliminate a great deal of the debased, depraved, and vicious practice in employing teachers that seems to exist in some sections of this country.

The one and paramount question to be answered in the selection of a teacher is: *Is she the most efficient teacher that the system can employ under its salary schedule?* All other factors are subsidiary. Superintendents of schools, boards of education, and the entire American people, should awaken to the realization that the public schools are basic and fundamental in the civic, moral, and industrial advancement of this country. This nation cannot rise above its educational systems. These systems cannot succeed without cultured, trained, and sensible teachers. This type of teacher cannot be secured without precautionary measures on the part of those who are intrusted with their selection. Every community, every county, every state, should place its schools above selfish, petty, and political dickering, and should build around the public schools a barricade of pride, ethics, and child-interest, through which no job hunter, no money power, no political pressure can break, to rob the American children of the best teachers that can be secured with the available income.

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EDITORS:

WM. GEO. BRUCE WM. C. BRUCE

A Condition versus a Theory in School Administration

THE educators of the country are setting forth in eloquent and convincing terms the mission of public education and the necessity of maintaining the public schools up to high standards. This claim cannot be refuted. It is based upon the theory that popular education is the mainstay of our stability and perpetuity as a nation.

So much for the theoretical claim. The administrative authorities in immediate charge of America's system of popular education are, however, confronted with a condition. That condition implies a decline in property values, a diminished tax income, and a consequent reduction in the school budget. This compels in instances a reduction in the length of the school term, a reduction in salaries, a curtailment of supplies and equipment, and a halting of building projects.

The question at issue is whether all these things can be done without impairing the efficiency of the school system as a whole. Will the child suffer, and if so to what extent? This is the problem of the school administrator who must manage with the means at his command, and make the dollar go as far as possible.

While the commercial and industrial interests of the country are undergoing a readjustment which means a reduction in cost of commodities and labor, it also follows that the cost of government is bound to be lowered. If costs are to be maintained, it only follows that with a decline in property values and a consequent diminished income the tax rate must be increased. Such increases will be resisted by the taxpayer on the plea that a lower cost of things logically means also a lower cost of government.

The public schools being an essential and vital part of the government cannot well escape the economic adjustment which is nation-wide and general. It is well for the educator to uphold the ideals and principles upon which the nation is founded, but it remains for the school administrator to square a budget in the light of high ideals and accepted principles. He is confronted with a condition and not a theory, and must make the best use of the means at his command.

Finally, it must be said that the boards of education throughout the land have stood unflinchingly by the schools. They have gone with deliberation and circumspection about their task, and have proved themselves strong, fearless, and dependable. They have weathered the storm with confidence and optimism. They have not been unmindful of the ideals which must control popular education, they have mastered the perplexing task intrusted to them in the preservation of these ideals.

Tax-Law Revision and School Support

THE State of California has under consideration, an amendment of its present tax laws whose main features are embodied in the following:

1. It is proposed to reduce taxes on real and personal property by transferring from the counties to the state the counties' present obligation for the support of schools.

2. It is proposed to increase the state's revenues for this purpose by means of two new forms of taxes; namely, a state tax on personal incomes, and a selective sales tax.

The proposals are interesting in that they aim to go to the very bottom of the problem of state and community taxation. Furthermore, it may be stated that what applies to the tax situation of California applies with similar force to most of the states in the Union. There are states that have an equitable and workable income tax, but many more have not. There are states that provide adequately for the maintenance of their schools, but there are also states that are woefully behind in the matter of school support.

Everywhere the cry is raised that the taxation on real estate must be lowered. Delinquencies have been piled mountain high. And yet in all states the property tax constitutes the main source of government support. With a decline in property values a higher rate of taxation must be exacted if the same volume of income is to be secured. Will a taxpaying constituency stand for a greater pressure upon property holdings?

"Today, real and personal property are bearing heavier tax burdens than ever before. In many instances taxes on farms amount to 50 per cent, and more, of the total income from the farms. Home owners find themselves paying taxes equal to from 12 to 30 per cent of the rental expectancy of their homes."

So says Dr. Elmer H. Staffelbach, a California tax expert, and adds: "On the other hand, the highest rate paid by any public utility corporation is 7½ per cent of its gross income. And whereas the taxes on the corporations are adjusted annually with respect to the actual income of the corporation, the taxes on farms and homes remain the same regardless of the size of the incomes they produce."

It has been obvious for some years that the property tax must sooner or later become obsolete. The United States is the last of the great countries of the world that still clings to the antiquated property tax as its main revenue producer in support of state and local government. The time is opportune to turn to the subject of tax reform.

The educational interests of the country are vitally concerned in an adequate support for the schools. Hence they are also concerned in a revision of the tax laws. The schoolmaster must not only be familiar with present tax laws, but he must also know something of the principles of taxation as evolved by the century past and accepted by the economists of the world over.

So far as the United States is concerned it must come to the realization that the property tax is unsatisfactory and that an equitable income tax must take its place.

The Board of Education—An American Institution

WHILE the modern board of education is the result of an evolution in the machinery devised for the government of the public schools, it nevertheless happens here and there that the scope and function of such a body is misunderstood and the expediency for its existence brought into question.

It has happened frequently within the past decade that a disgruntled taxpayer has sought the abolition of the school board. A futile attempt was recently made in Ohio to introduce a bill which sought to abolish all the county boards of education of that state. Similar attempts have been made in the past, more particularly in abolishing city boards of education.

The question here arises as to what form of administrative machinery shall be devised. Who shall govern the schools? In some cities it was suggested that an aldermanic committee should be intrusted with the task. In others it was urged that a city manager who directs all public affairs include the management of the schools in his job.

The fallacy of these suggestions becomes clear when the subject is properly analyzed. The alderman who is intrusted with local governmental affairs embracing the police, fire, and health service, and the care of streets and alleys, has no time to look after school affairs. The city manager, who is supposed to be an engineer versed in the construction of sewerage systems, waterworks, roadways, and the like, is hardly in a position to preside over the government of a school system.

The proposals to abolish the school board and intrust the duties of such a body upon some other municipal agency are by no means new. They have been threshed out to their finality. The result has always been that a new understanding of the expediency and service of the board of education is secured. The nature of school administrative service is such as to require a high type of citizenship in the performance of that service, and the enlistment of a body of men and women who will give special study to the needs of a school system and care to the problems arising therewith.

It is safe to say that the board of education as exemplified in this country is an institution which is typically American and which performs a service which is vital to the stability and perpetuity of the nation.

Public Relations Service and the Public Schools

THERE has been a tendency in recent years to stimulate a better understanding between the public and its schools. This tendency has received a new impetus in the light of the increased cost of the schools and a more scrutinizing taxpaying constituency. The school authorities have been more inclined to give fuller information to the public press regarding their policies and departures. They have recognized the fact that the public, or at least a large fraction thereof, wants to be informed.

The very fact that the school authorities are anxious that the public shall know what they are doing and what the schools are accomplishing has its beneficent results. The public may not always agree with what a board of education or the superintendent of schools are doing, but frankness allays the suspicion that something may be wrong. Unquestionably public expenditures are scrutinized with greater care at this time than ever before. The government of the schools comes within the scope of that scrutiny.

While the expediency of a definite public-relations service, as an agency of or adjunct to a school system, has never come into serious consideration, it has nevertheless been apparent that someone connected with a school system must perform that service. The importance of giving out authentic news of what happens in school circles is no longer questioned. The secretary of the board of education may be reluctant in giving out the facts, but such reluctance sometimes rests upon a lack of news sense. A superintendent of schools may hesitate in discussing school happenings with newspaper representatives, and yet he ought to be recognized as the official mouthpiece of a school system. Much depends upon his tact and judgment in dispensing school news.

Occasionally a newspaper editor awakens to the value of a public-relations service. The editor of the *Dispatch,* Oneida, N. Y., recently said: "The people of the city who are, after all, the owners of the schools of the city, should concern themselves with these schools. They should know them; they should know the board-of-education members; they should make the acquaintance of the superintendent and his assistants and should come to know the teachers.

"The education of the young of the city and the surrounding countryside is the duty and the responsibility of all, and as it is both a duty and a responsibility, it should also become a pleasure and a privilege.

"Let us stand square-toed behind those charged with the education of our young. Let us commend their good work, as we criticize if we believe they err. Let us support their efforts in behalf of the boys and girls and let us begin by knowing our schools and the people who are in charge thereof."

The average board of education is bound to receive its share of criticism in the course of its existence, but an attitude of candor and frankness will silence rather than stir unfavorable comment.

The Trend of School Litigation

THE volume of lawsuits adjudicated from time to time in the courts throughout the land would lead one to believe that eventually all important points in the school laws would be clarified and thus lessen litigation. A study of the legal digests of cases, reported from month to month, affecting school interests, however, indicates that such litigation has increased rather than lessened in recent years.

The explanation must be found in the fact that new school laws are usually followed by conflicts of interests which are not readily adjusted in the light of the simple letter of the new statutes. The courts must be called upon to interpret and clarify these laws upon disputed points and to render their administration conclusive.

The bulk of current school legislation rarely involves basic changes in the social, economic, or political concepts and provisions for education. It is rather directed to strengthen the machinery of education by new laws or amendments of old laws, which shall provide for more effective creation, alteration, or dissolution of school districts, revision of tax methods, and the collection and distribution of school funds, broadening the duties and responsibilities of school officials, adjusting the business relations of the administrative authorities and the professional forces. Such new legislation is not always within the grasp of those affected thereby. The right and wrong of things in the light of such legislation is not always clear to the lay mind. Then, too, someone blunders and innocently becomes a violator of the law. Personal animosity sometimes precipitates court fights. The taxpayer stands ever ready to contest what he believes to be an infraction upon his rights and economic interests.

There is no question that the economic condition of the country has affected litigation as a whole, but litigation over school matters as well. The contractor whose claim is contested resorts to the courts to compel payment; the superintendent, principal, or teacher who is dropped will assert his or her legal rights, the parents whose son or daughter has been chastised will seek redress. In scanning the litigation entered into in the school field, we find with an unbelievable frequency, for instance, the spectacle of a board of education which finds itself in the embarrassing situation of having elected two superintendents or principals instead of one, or employing two teachers where only one is wanted. These complications usually grow out of factional contention.

Another regrettable situation arises where a school-board member commercializes his office by selling land or supplies to the school system. The laws covering the relations of the school official and the system which he governs are usually quite clear, and yet violations are reported with greater frequency than one would ordinarily imagine. While these infractions are due to cupidity, they are also frequently due to sheer ignorance of the law.

In general, the courts have been rarely looked with favor upon legislation which is a radical departure from long-accepted principles of social justice and personal rights. The original ideas of the constitution as to personal and parental rights, as to the rights and duties of the state, have been little changed. That attitude has been very recently expressed in the so-called Oregon private-school case, the Nebraska language case, and various cases affecting the rights of teachers and pupils as individuals. Perhaps the most notable tendency to change a traditional point of view is found in New York and California where the supreme courts have held school authorities responsible in case of personal injury caused by evident negligence.

The conclusions drawn from the tendency of increased school litigation must be in the direction of greater clarity in the laws governing school administration and the dissemination on the part of state authorities of information regarding school laws.

School Publicity

THERE is evidence in numerous communities that school boards and superintendents are neglecting the opportunities of publicity as a means of promoting school welfare and of preventing the agression of destructive and reactionary forces. The silence with which many recent attacks have been met is disturbing in that it reflects a certain timidity on the part of the professional schoolmen or a lack of complete information on the part of the lay representatives of the community on the school boards. Whatever the cause, it is distinctly unwise to let criticisms of the schools pass without making dignified, factual statements of conditions.

The Functions of a Research Department

Clarence E. Howell, Director of Research, Trenton, New Jersey

This is an attempt to compile in outline form a definite, somewhat comprehensive, list of the specific duties which might be assigned to a research department in a public-school system. In its original form this data was used in an attempt to justify the creation of such a department in a particular city. Except that the name of the city is omitted, the report remains largely as it was when approved by the superintendent of schools. The items, comments, and information given were gleaned from many sources, including professional textbooks, magazines, letters, printed reports, and my own ideas.

The Need

A board of education cannot afford to spend school money on the basis of mere opinion, when the determining facts should be available. Scientific research and investigation is an essential working tool of modern management everywhere, education not excepted. The rule-of-thumb worker in public-school work has lost his prestige in favor of the man who knows how to marshal facts, and who works with reference to facts.

Private industry, as demonstrated by the Bell, Westinghouse, Edison, General Electric and other companies, has not been blind to the possibilities of laboratory research as a valuable part of industrial organization. Our national Department of Agriculture, with its many experiment stations, illustrates how government and the people have profited by bringing research to bear upon problems of national import.

All decisions made by a school officer should be based upon facts. Only by the securing of facts as a basis for planning can he, whether superintendent, principal, supervisor, or attendance officer, make intelligent decisions regarding innumerable questions arising in the school system, questions ranging all the way from the most desirable type and size of school desk, to complicated matters of general policy, curriculum, and course of study making, educational organization, costs, buildings, and bond issues.

In the last analysis, this department provides the means of measuring the success of all other departments, and hence its importance cannot be overestimated. The money spent in proper office equipment, adequate clerical assistance, and competent directorship can be considered as one of the best investments it is within the power of the board of education to make.

The question in the modern school system is no longer, "Shall we introduce research?" but "How can the school make research a more effective part of our scheme of public education?"

General Functions

The general function of the Department of Research should be to conduct a continuous survey of the school system, and to coördinate, extend, and direct research activities within the system to the end that reliable data may be available upon which to base the educational policies of the superintendent and his assistants. It should be the central clearing house for gathering, tabulating, and interpreting statistics in any of the fields of schoolwork.

Authority and Responsibility

Its authority should be advisory, not administrative, working directly under the superintendent, and responsible only to him, so that it may be free from any incumbrance of a multiplicity of assignments and obligations.

By constant study of the schools, it will provide the fact basis for their management. Its field is the entire system, and its service is indirectly to all workers from the board of education to the men in the workshop or store. On any problem, from budgeting or cost to the standardization of supplies or the handling of a case of truancy, this department will furnish facts as a basis for decisions. Gradually it will become a storehouse of information, so organized and filed that it can be drawn upon on short notice for a wide variety of services.

While the main energy of teachers and administrators is given over to the operation of the schools, the Department of Research is relieved of actual teaching and other responsibilities in order that it may, through untrammeled investigation and study, suggest ways and means of improvement, discover new things to do, try them out, and secure their adoption as normal procedure when they prove successful. The Department should be carefully protected and freed from time-consuming routine or administrative duties that will weaken the effectiveness of the service it should render. It should coördinate with line officers, but must remain essentially a staff organization devoted to staff service.

Specific Field

The following will give an idea of some of the definite activities available to a Department of Research in a public-school system.

1. Cost and Finance

Possible Special Assignments. To furnish requested relative cost comparisons, in conjunction with the school accountant, concerning such matters as —

a) Pupil costs in different grades and different schools.

b) The cost of teaching different subjects in the same grades and in different grades.

c) The sources of school revenue, actual and possible.

d) How the city spends its money.

e) How school money is spent.

f) Studies and revisions of teachers' salary schedules.

g) Help on budget studies, preparation, and analysis.

h) Figures on costs per unit, such as per pupil, teacher, square yard, or cubic foot.

i) The efficiency of different types of buildings.

j) Consumption and cost of supplies by schools, grades, and teachers.

Routine Assignments. None.

2. Organization and Administration

Possible Special Assignments. To assist in obtaining facts regarding such matters as —

a) The internal organization of the schools.

b) Adjustment of school requirements to capacities and needs of the pupils.

c) Comparison of local with other school systems.

d) Obtain objective data upon which the superintendent may base recommendations for the improvement of administrative policies.

e) Location and description of school districts.

f) City's rise and rate of growth.

g) The occupations of the people.

h) Proper use of clerical service in schools.

i) Minimum standard achievement requirements in all schools alike before promotion is certified.

j) Population, racial, industrial, and traffic maps for the superintendent's office.

k) Detailed organization charts showing every main group of functions and the offices responsible for them.

Routine Assignments. None.

3. The Curriculum

Possible Special Assignments. To carry on studies and investigations involving, among other things —

a) Uniformity in interpretation of the several courses of study.

b) Curriculum revisions.

c) Part-time curricula.

d) Adult education.

e) Coöperative courses.

f) Revisions of time allotments.

g) Curricula coördination.

h) Comparison with other cities.

i) Subject time allotments in various schools.

j) Facilities needed for carrying on instructions.

k) What courses are needed in high school, and what demand is there for them?

Routine Assignments. None.

4. Buildings, Grounds, and Equipment

Possible Special Assignments. Information and facts regarding such items as —

a) Present efficiency of the school plant.

b) Scoring and photographing buildings and building conditions to assist in publicity for needed school buildings.

c) The expected life of the plant.

d) Distribution of plant facilities.

e) Surveys of population and enrollment trends to guide in building program.

f) Educational objectives and the school building program.

g) Best types of buildings for various kinds of curricula.

Routine Assignments. None.

5. Reports; Records; Forms; Publications

Possible Special Assignments. To assist or take active charge in —

a) Editing the publications of the board of education.

b) Plans for keeping proper information before the public through a school bulletin or otherwise.

c) Devising indexing systems and new forms.

Routine Assignments

a) Permanent pupil and teacher record statistics.

b) Statistics for the superintendent's annual report.

c) Permanent school records.

d) Development of cumulative record and report cards.

e) Weeding out obsolete forms.

f) Revising old forms.

6. Testing and Analyzing

Possible Special Assignments. The wide possibilities of the testing program are indicated by these suggestions:

a) Recommendations based upon the results of tests, as to modifications of the courses of study, methods of teaching, and pupil classification.

b) Intelligence and achievement testing relative to curriculum, adjustment, and recognition of individual pupil differences.

c) Intensive studies of certain pupil groups, following extensive preliminary tests, to reveal pupils' weaknesses and make it possible to explain to teachers and supervisors exactly what is wrong, and what they need to do to improve.

d) Devising sets of objective tests definitely representative of the several local courses of study, to be available to teachers for their use in checking the results of instruction.

e) Standardization of scores and marks throughout the system, to facilitate interpretations and comparisons of results.

f) Studies to account for one or more schools doing better or more work than others.

g) Determine the efficiency of operation of certain school units.

h) Analyze promotion rates.

i) A long-term study of the effects of ability groupings.

j) Help to teachers, principals, and supervisors in planning experiments.

k) Careful individual studies of pupils two or more years behind their proper grades

Routine Assignments

a) Maintaining a complete library file of sample standard tests.

b) Select standard tests to be used, and supervise the devising of tests for local needs.

c) Decide who will take the tests, when they are to be given, and by whom.

d) Attend to the ordering and distribution of tests.

e) Interpreting results of tests.

f) Supervise and interpret the State Department Examinations.

g) Direct the training of examiners and the giving of the Binet-Simon first-grade tests, and all

(Continued on Page 64)

Von Duprin

REG. U. S. PAT. OFF.

Self-Releasing Fire and Panic Exit Latches

Catalog 28V shows a Von Duprin device for every purse and every purpose. Or see Sweet's, Pages C3217 - C3219.

The Whole Idea

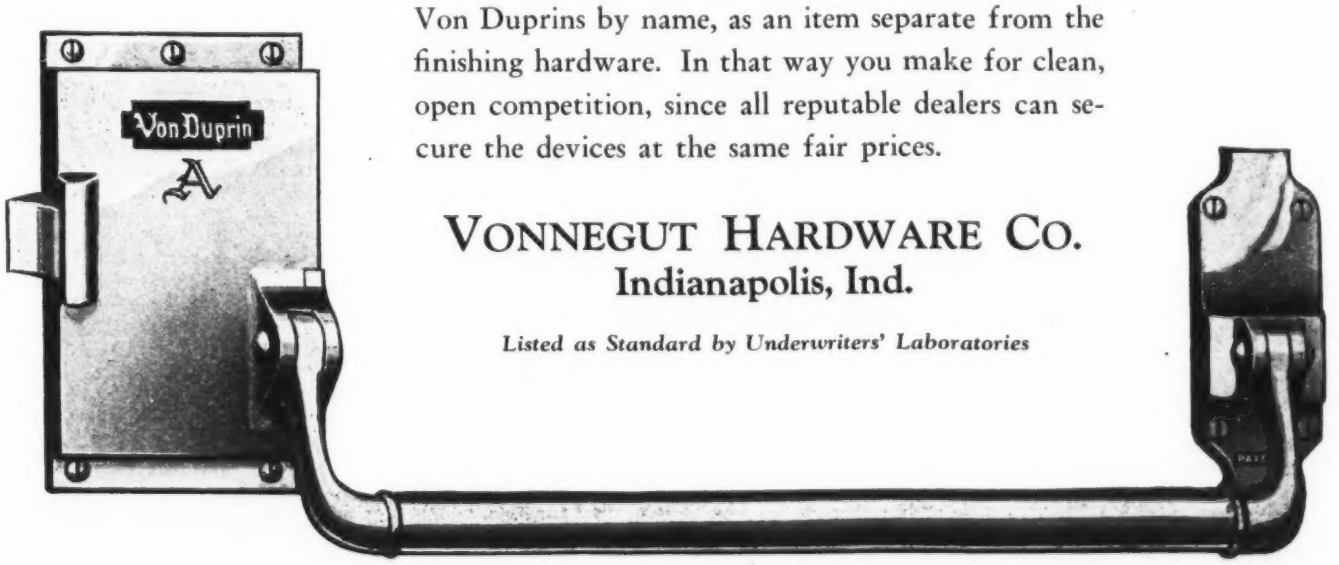
Von Duprin latches are designed and built with one idea constantly in mind - - that, without absolute certainty of action at all times, a panic device is totally useless.

Unlesss you are sure the device will work when it is vitally needed, it is worse than a mere sham, for it creates in the minds of the occupants of that school a wholly false sense of security.

Von Duprin devices are so carefully designed, so sturdily made, so thoroughly inspected, that, once they are properly installed, you can be absolutely sure that they will operate properly, even under the heavy demands of emergency duty.

Incidentally, this same careful, thorough workmanship also brings a freedom from upkeep expense which cuts the cost of operation to the very minimum.

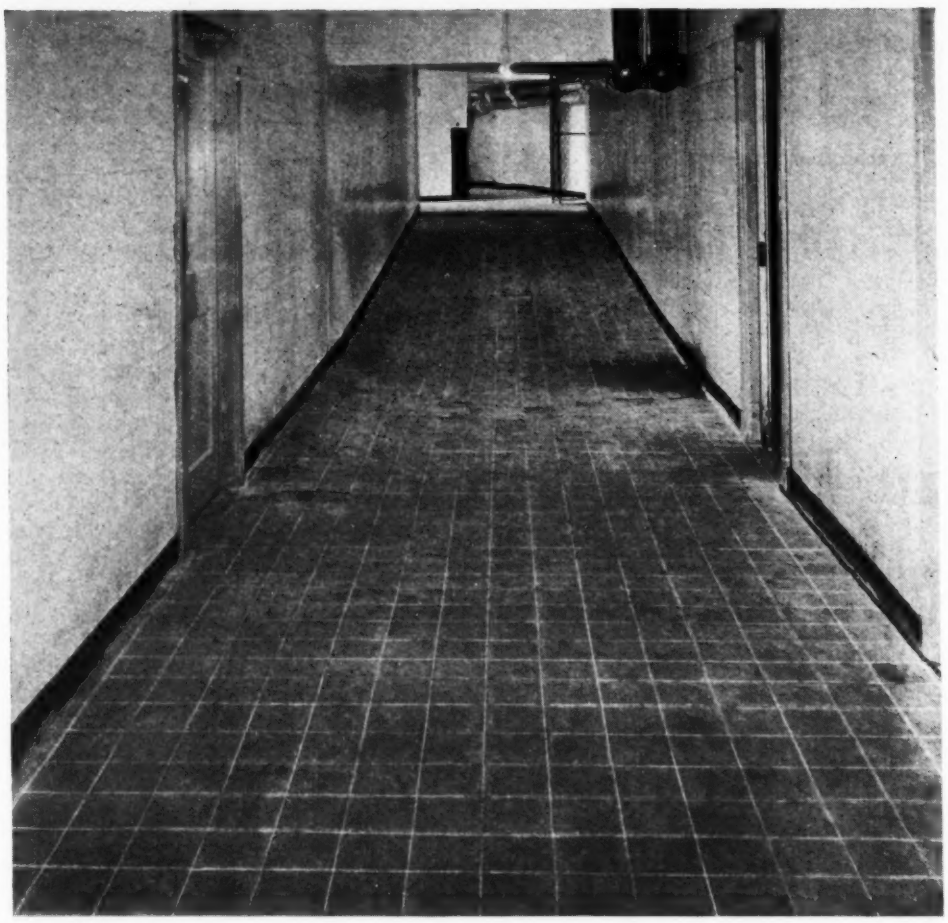
For utter safety, for the greatest possible economy, we suggest that you ask your architect to specify Von Duprins by name, as an item separate from the finishing hardware. In that way you make for clean, open competition, since all reputable dealers can secure the devices at the same fair prices.



VONNEGUT HARDWARE CO.
Indianapolis, Ind.

Listed as Standard by Underwriters' Laboratories

This Ramp is Non-Slip—*Even Though Wet*



IT IS in a tunnel connecting buildings in a large and well known university. There is considerable traffic including much trucking of food from a central kitchen. Being far underground, there is almost always condensation from the overhead pipes. As a result the original cement floor was always slippery and troublesome.

Then Alundum Tile was installed. It gives a safe, firm footing at all times, making trucking easy even on the ramp. The condensation is still present but the moisture does not lessen in the least the non-slip effectiveness of Alundum Tile.

There are many places such as this where Alundum Tiles have solved troublesome floor or stair problems. Can they be of service to you?

NORTON COMPANY, WORCESTER, MASS.

NORTON FLOORS
Alundum Tiles, Treads & Aggregates

T-324

School Board News

♦ Enid, Okla. The school board has revised its accounting system in order to comply with a new state law. The new system calls for an annual auditing of the school expenditures, covering the clerk's office, the school treasurer, and the special-activity funds. Previous audits failed to include the special activity funds.

♦ Philadelphia, Pa. The limiting of bidders for school milk and ice-cream contracts to "invited" concerns has been declared illegal by Mr. Walter B. Saul, a member of the board. Mr. Saul protested the practice of excluding all but a few restricted firms from bidding for contracts. Formerly, the bidding was limited to Philadelphia concerns, but this year it was voted to include a few responsible outsiders to increase competition and lower prices.

♦ Boston, Mass. The school board has adopted a policy of naming unemployed teachers to positions as teachers in the evening schools. It is estimated that 75 per cent of the evening-school teachers are not employed in the day schools.

♦ Springfield, Mass. A city-wide study of the problems of transportation for school children has been started by a special committee of three members of the school board. The study was ordered by the board following complaints of school patrons that their children should be given transportation to one of the junior high schools.

♦ Supt. Zenos Scott, of Springfield, Mass., recently reported to the school board that the teaching and clerical staffs are 100 per cent strong in contributing 10 per cent of their salaries to the city. Teachers listed for substitute work have offered to make similar contributions provided one week's compensation is more than $18.

♦ Dodge City, Kans. Under the administration of Mr. S. F. Gish, president of the board of education, the committee system has been eliminated. All questions coming up for discussion are brought before the entire board. The plan which is in the second year of its operation, has met with the approval of all members and is considered quite successful in use.

♦ Waukegan, Ill. The township high school board has voted against the refund of night-school tuition fees for the present school year. Formerly students who attended classes 80 per cent of the time were refunded their tuition fees. The charge is $3 for students living within Waukegan township, and $5 for those outside the township limits.

♦ McPherson, Kans. The board of education has authorized the superintendent of schools to accept as many postgraduate students as can be comfortably handled. All postgraduate students must pay the customary tuition charge. A number of former students had asked permission to enroll as postgraduate students.

♦ El Paso, Tex. The school board has reduced its school nursing staff from nine to four nurses for the current school year. The school board and the city each pay an equal share of the expenses for the nursing service.

♦ Hibbing, Minn. The school board has adopted a schedule of half-time employment for various school positions, including clerks, firemen, assistants in gymnasiums, library assistants, and janitors. The action was taken to give more people work.

♦ Superior, Wis. The board of education recently voted a levy of $477,529 for the school year 1933, which is a reduction of $109,072 below the levy requested last year. The major reduction in the levy was a return to the board of $49,824 in teachers' salaries as ordered by the board.

♦ Houston, Tex. The school board has adopted new regulations for athletics in the senior high schools. Under the rules, the management and control of all athletics in the school is in the hands of a council, consisting of the superintendent of schools, the director, and assistant director of high schools, the director of physical education, and the principal of each of the senior high schools.

The handling of tickets and the receipts are delegated to a bonded individual designated by the council. The supervision of grounds, play fields, and other places where contests are held, are delegated to a person appointed by the council to work under the direction of an executive committee.

♦ St. Clair, Mo. The school board has adopted new tuition rates for the school year. High-school nonresident students will be charged $90, and elementary pupils $40.

♦ El Paso, Tex. The school board recently rejected a proposal of Mr. Paul Harvey, a member, that the city set up its own insurance for school employees. The proposal was defeated when it was explained that the school board would be compelled to establish a large reserve to pay claims in case of deaths among employees.

Mr. Harvey made the suggestion because he felt that a good deal of the insurance business could be kept in the city if the board would adopt its own insurance. Last year the school board adopted a group life-insurance plan under which it agreed to pay 5 cents a month on each policy issued. Employees paid the remainder of the premiums. Approximately $4,000 was paid out to the insurance company in premiums.

♦ Oklahoma City, Okla. The school board recently made an allotment of $1,135,000 in insurance on city school property. The insurance was distributed among 50 agents, including 15 companies which had not previously been represented. The total premiums on the renewed policies amount to approximately $8,000.

♦ El Paso, Tex. The school board has voted to allow twin children under 6 years of age to attend kindergarten 25 per cent cheaper than other children. In other words, it will cost $8 to send two children born on different days, but twins will be admitted for $6.

♦ Oklahoma City, Okla. Under a new policy, the school board will retain the $2 fee for night-school attendance. Formerly, the fee was refunded to the pupil at the close of the night-school season.

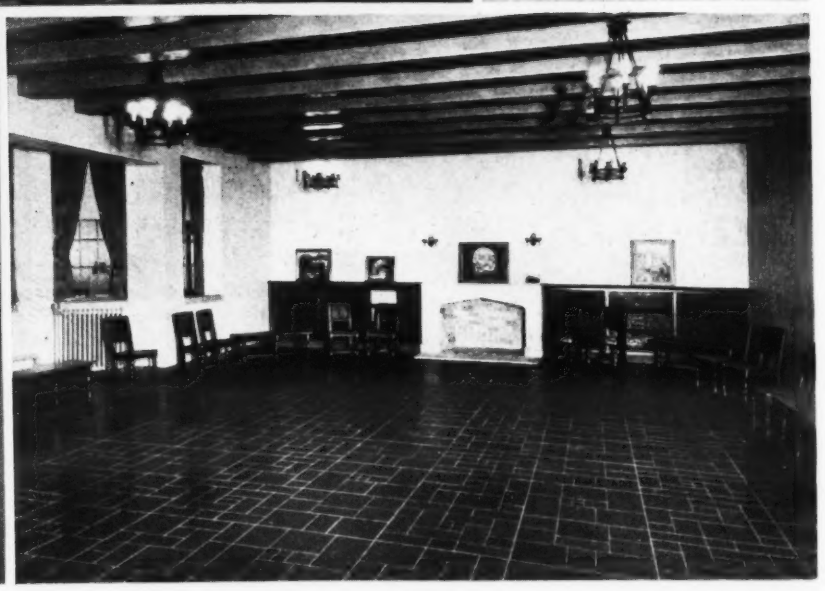
♦ South Bend, Ind. The school board has opened the night schools on a self-supporting basis. A tuition

(Concluded on Page 54)

SCHOOL PROPERTY

The total value of all school property in the United States in 1930 amounted to $9,302,048. The total endowments of all educational institutions from public elementary schools to private and public universities, etc., was $1,914,656. The total value of educational holdings was $11,216,704, or approximately 7.2 per cent of the assessed valuation of all property in the United States in 1928 subject to taxes.

With the aid of Sealex Linoleum, Topeka's new $1,750,000 high school demonstrates what can be done by the close collaboration of architect and flooring contractor. Thos. W. Williamson and Company, architects, and O. McCormick Rug Company, flooring contractors, both of Topeka, Kansas.



In Topeka's Senior High School

Topeka, Kansas (population about 65,000) has a $1,750,000 high school which the largest cities in the country might readily envy. Several acres of Sealex Linoleum Floors were installed in this splendidly equipped building—in more than 100 rooms—in over half a mile of corridors. These modern school floors offer the highest degree of colorful beauty—assure greater quiet throughout the building—and cut down maintenance costs.

The rooms pictured above are excellent examples of Sealex Linoleum's ability to cope with any situation. In the Art Gallery, a Sealex Veltone Linoleum Floor is decorative—yet does not distract attention from the exhibit. In the English Room, the Sealex Floor in a cut-to-order tile design harmonizes with the old-world atmosphere.

The gymnasium floor illustrated is also Sealex Linoleum, with permanent, inlaid game markers of contrasting colored linoleum. Durable, resilient, splinter-proof — Sealex Linoleum stands out as the ideal gymnasium floor.

Write us for full information on Sealex Floors—and on our Bonded Floors expert installation service, in which Sealex materials are backed by Guaranty Bonds.

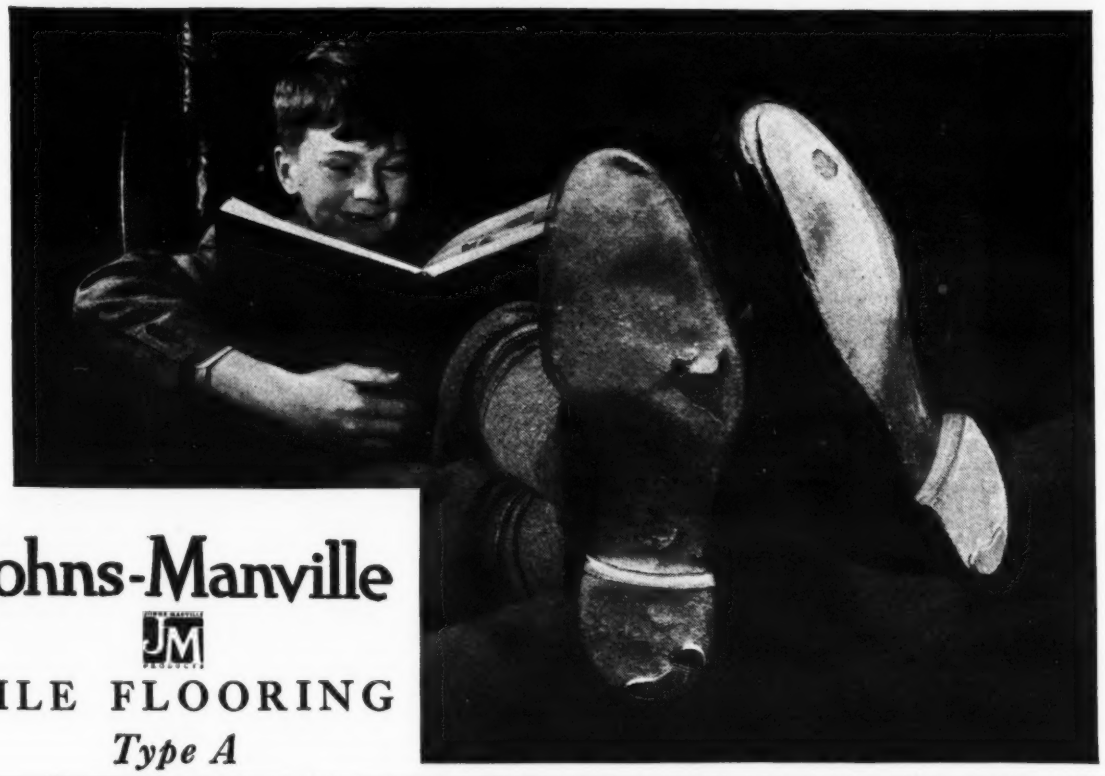
CONGOLEUM-NAIRN INC., KEARNY, NEW JERSEY

SEALEX
REG. U.S. PAT. OFF.
LINOLEUM FLOORS

Hard on Shoes..Hard on *Floors*

YOU'D almost say he took a mischievous delight in wearing out his shoes — in providing teachers and school boards with flooring problems to worry over. Yet he really never gives these matters a thought. He's just an active, growing boy with restless feet and an abundance of energy.

And Johns-Manville has solved one of the problems he presents. They've provided a flooring for schools that he, and the millions like him, won't wear out even with years of use.



J-M Tile Flooring *thrives* under school traffic. It has a high resistance to abrasion. The constant buffing of footsteps over its surface serves only to bring out its luster.

Nor does this long-lived flooring require more than a minimum of care. An ordinary brush or broom — an occasional wash-down with soap and water — is all that's necessary to keep it clean and attractive. Inks won't stain it . . . neither will ordinary acids.

This floor is comfortable . . . quiet . . . and safe for hurrying feet.

• • •

The rich colors in which this flooring is available will add warmth and cheer to the appearance of your school buildings. 12 solid colors and 8 mottled colors are offered, in tiles from 3 in. to 12 in. square, to combine with any decorative scheme.

In two thicknesses, 1/8 in. and 3/16 in., the cost of J-M Tile Flooring is comparable with linoleum of the same thickness.

Because all good flooring needs skillful laying, Johns-Manville has appointed Authorized Flooring Contractors in over 300 cities to serve you.

Send for the booklet, "Underfoot Overhead," giving full details. Address Johns-Manville, 292 Madison Avenue, New York City.

Johns-Manville

JM

TILE FLOORING

Type A

(Concluded from Page 52)

fee of $2 a quarter, or $8 a term, is required, in addition to the regular enrollment fee of $1.

♦ Chicago Heights, Ill. The school board has proposed a new plan calling for the sale of tax-anticipation warrants for financing the schools. The board requires a minimum of $32,000 to pay teachers' salaries during the current school term.

♦ Chattanooga, Tenn. The teaching staff has recently taken up the matter of donating one week of their time to the city in free service. The approval of the plan means that the schools can be kept open nine months instead of eight during this term. A similar plan was followed last year which worked out satisfactorily.

♦ Brookfield, Ill. The president of the high school board has reported that $30,500 in cash has been received from the sale of bonds issued under a special emergency act of the state legislature. The money will be used to pay current bills of the schools already incurred.

♦ San Antonio, Tex. The school board has redeemed teachers' pay warrants to the value of $59,350. The warrants will be paid from state apportionments and from back tax collections.

♦ Big Spring, Tex. The school district has this year offered a partial-payment plan to taxpayers, in order that they may pay part of the taxes of the current rolls beginning with September, and continuing until January 31. As a result, a number of the large property owners have paid their taxes. These payments have enabled the school board to meet the first monthly payroll of the school term. The budget for the present school year has been reduced 38 per cent below that of last year. Teachers' salaries have been reduced 30 per cent and the teaching load has been increased.

♦ Lincoln, R. I. The tuition bill for secondary education for the year totals approximately $45,000, according to Supt. John L. Smith. The total covers a list of 343 students enrolled in schools in other cities and towns.

♦ Rutland, Vt. The school board has ruled that the amount to be deducted from a teacher's salary for absence shall not exceed the amount paid the substitute.

♦ Two Rivers, Wis. The school board has effected a cut of $80,000 in the annual school budget, through the elimination of part-time janitors, the temporary elimination of a number of subjects, and reductions in other operating expenses for the present school year.

NEW YORK STATE SCHOOL BOARDS MEET AT BUFFALO

Mary W. Jewett

More than 400 school-board members attended the thirteenth annual meeting of the Associated School Boards and Trustees of the State of New York at Hotel Statler, Buffalo, N. Y., on October 10 and 11.

The program was planned to meet the special problems confronting school boards at this time due to economic conditions. After a welcome by Mr. J. J. Egan, president of the Buffalo board of education and a response by President Jewett, Dr. George D. Strayer of Teachers College, Columbia University, gave a forceful and constructive address on "Maintaining Educational Efficiency and Reasonable Economy Under Present Economic Conditions." Dr. Strayer pointed out that the cost to society of failing to provide suitable education for all young people is sometimes expressed in juvenile delinquency, and that while it cost $400 a year to provide custodial care for a delinquent, the cost of education, which would decrease delinquency, is in most of our communities, less than half that amount. He drew attention to the fact that fundamental changes have taken place in our society which impose a large load upon the school. To meet these conditions a more generous program should be provided.

Dr. Strayer suggested that studies be made and advantage be taken of all possible economies from readjusted salary schedules, elimination of waste in maintenance and janitorial service, and reorganization of schools and classes to provide better utilization of equipment and teaching forces.

Other discussions of the first days' sessions were by Dr. Franklin J. Keller, Principal, East Side Continuation School, New York City, on "How Can School Resources Best be Used in the Service of the Unemployed?"; by C. C. Ward of Buffalo University, on "Teacher Training in Service"; by Edward M. Parrott, President Lake George Board of Education, on "Wise Handling of Ability Grouping in Village and Rural Schools"; by Judge G. M. Cheney, Corning, on "Training Children in School for Helpful and Intelligent Community Life"; by Herbert S. Weet, Superintendent of Rochester Schools, on "How Far Would Changes in the State Education Law Help the Present Economic Emergency"; by Theodore Zornow, Rochester Schools, on "Can Our Schools Train Children for Helpful and Intelligent Community Life"; by Chester A. Pugsley, Professor of School Administration, Teachers College, Buffalo University, on "Reducing and Handling Student Failures"; by Thur Smith, President Central Rural School District Boards Association, on "Do Rural Schools Fit Children for Rural Life"; and by Harry L. Case, Junior Extension Leader of Chenango County, on "Benefits of 4–H Club Work in Rural Education."

The Annual Banquet was addressed by Dr. Frank Parker Day, president of Union College, Schenectady, on the subject, "What Are Schools and Colleges Trying to Do?" He said, "Let us hope that the school and college of the future may encourage in all young minds a generous attitude toward life, a moral sense toward others, a love of inquiry, and a search for truth.

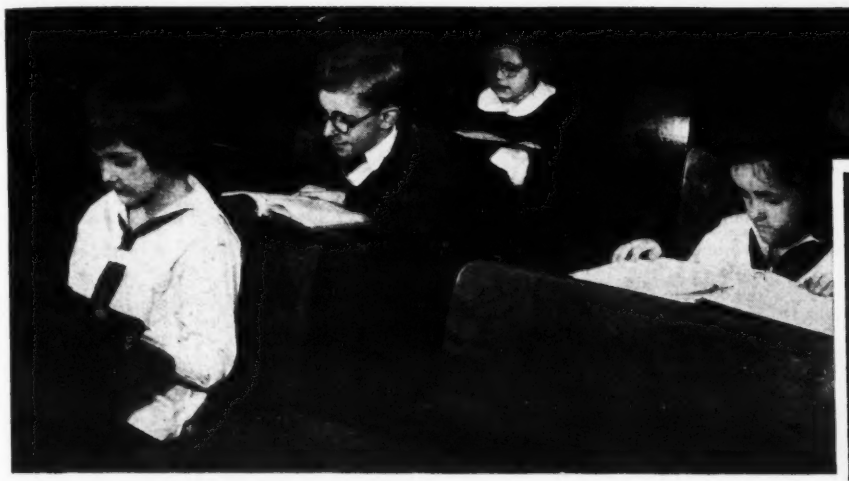
At the session on Tuesday, increased state aid in education as a method of bringing lower taxes on real estate was proposed by Charles A. Brind, Jr., Assistant Counsel of the State Department of Education. Mrs. John K. Norton, Associate Director of Research of the National Education Association, spoke of opportunities for increased service to schools in times of depression. She said, "Schools are being revaluated as a part of democratic society. They are becoming laboratories in which the character of children may grow and develop." Clarence S. Marsh, Dean of the University of Buffalo, discussed adult education. He said, "Adult education no longer is an apologetic attempt to make up for loss of opportunity in youth.

At the business session, President Raymond S. Jewett reported that 37 new member boards had joined the Association during the year, bringing the total membership to 282 boards. Mr. Jewett suggested the need for a change in the curricula of both elementary and secondary schools, in order to train pupils to meet changed conditions.

The officers for the ensuing year are: President — Guy W. Cheney, of Corning; vice-presidents — H. H. Leonard, East Aurora; Harold L. Fuess, Waterville; Dr. James T. Ivory, Binghamton; Mrs. Charles O. Judkins, Glens Falls; James H. Anderson, New Rochelle; and G. Burchard Smith, Freeport; Treasurer — Dr. Frank Quackenbush, Northport; Executive Committee — Mrs. Henry G. Danforth, Rochester; Charles G. James, Hornell; Mrs. E. L. Robertson, Syracuse; Mrs. Florence Hartman, Amityville; Harry S. Rivenburgh, Hudson; A. M. Farnsworth, Camden; Executive Secretary — W. A. Clifford, Mount Vernon.

The Association voted to affiliate with the Central Rural School District Boards Association. A resolution was adopted opposing any reduction in state-aid money, since such reduction would place an additional tax burden upon local real estate.

If her pupils' marks *are low!*



IF pupils consistently make lower marks in one classroom than in the others . . . don't be too quick to blame the teacher. Instead, make this simple test for the Twilight Zone.*

Take a phone book. Then go into that classroom and open the book at random. Can you read any name, address, and number rapidly and without effort? You should be able to do so readily—for the telephone book is scientifically designed for perfect legibility under proper light. If you can't—if you have to squint and draw the book closer to your face—the pupils are not getting enough light to do their best work.

The difference between a good and a poor grade is often the difference between adequate lighting and the Twilight Zone.

If you are doubtful as to the adequacy of your lighting, call in a Lighting Specialist from the Westinghouse office near you to make an accurate test—and when installing new equipment, specify Sollux Luminaires, controlled by Westinghouse Light-sensitive Relays, to rid you of the Twilight Zone. Thus you will eliminate the most common cause of the defective development of young eyes.

**That deceptive half-light between obvious darkness and adequate illumination.*

Sollux Luminaires will bring your building out of the Twilight Zone.

T 79395

Westinghouse

Westinghouse Lighting Specialists will help you plan an effective lighting system

DO NOT GRIND THE SEED CORN

When the depression is over the children, now coming up in the unending school ranks, will be older by several years. Outside the traditions of families and the memory of tragedies being enacted in hunger and death, this generation will forget, just as all others have forgotten, the lessons of the depression. Not a man who reads this but has read the story of the "hard times" of 1873 and of 1893, and not a man who reads this but was convinced that the halcyon days of 1922 to 1929 would last forever.

But, our school children are our national Seed Corn. Stunted bodies will be less conspicuous as a result of the present depression than those which followed any similar period in modern history. We have made some slight progress in public health and public relief to know how to care for the physical needs of the poor in times of great distress. The physical condition of the American people, because of scientific diet prescriptions and limitations of the poor, is better than in any other similar period in our history.

But, what about our educational growth?

Fortunately, we can see physical suffering and hunger, and become sensitive to the need. The stunting of the human mind by reduced school service can never be measured or defined. It is possible to rob a child of his birthright to an education, but the robber will always escape unpunished. The child cannot defend itself; in later life, the uneducated man is unable to define or correct his lack of training and opportunity.

The Seed Corn of the Nation is the generation now in school. We can deprive it of its educational opportunity, and even the parents cannot argue effectively the loss. The demand for public economy is growing so persistently that an endless chain of school blunders is ahead, unless the school authorities watch each step and literally stand between the schools and a national calamity.

The "Regular School Trade" is powerless to argue the point. On its part, even the weakest expression of concern is met by the silly charge of a "selfish motive." The conviction of truth and the suggestion of unselfish interest seems to be impossible in the disturbed state of public opinion.

The "Regular School Trade" is carrying on, despite curtailed consumption and unfair demands for price reductions. Research, new models, improved methods of production, are going forward. Faith in the schools as the safeguard of the Seed Corn of the Nation, is quite as positive in the "Regular School Trade" as the faith we bespeak for the taxpayer in his legal representative—the School Board. The "Regular School Trade" has a professional approach quite up to the standard of our American life and living.

When the American people understand that the "Regular School Trade" needs a profit for self-preservation, and that it gains its profit only as it sets up a fine professional service for the school children of America, then will there come a change of attitude and confidence. The schoolbook publishers, to illustrate, are neither profiteers nor leeches on the American school system. More professional service has gone into making schoolbooks, school benches, teaching devices, school equipment than into the "tools of service" in most of the professions.

Let's be fair and face the truth. The "Regular School Trade" has made a very important contribution. While the public support of education is measured in dollars, the American mind is able to grasp the professional contribution of school merchandise. The American people have demanded quality. The "Regular School Trade" has met the demand with a product.

Frank Bruce

Publisher.

HOLOPHANE sets the standard for *all* the illuminating requirements of modern schools

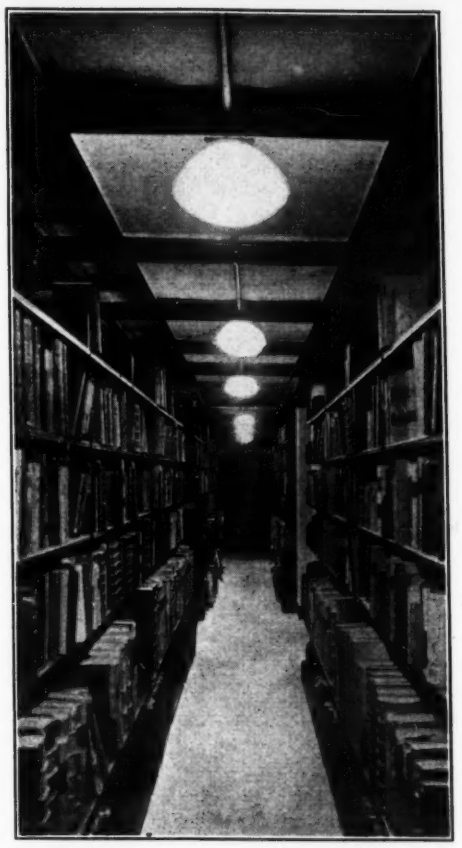
•

It is easy to find the book you want when the library is lighted with Holophane. The backs of all books are so well illuminated—from floor to ceiling—that the titles are easily read. Holophane provides scientific illumination for AUDITORIUMS . . . BLACKBOARDS . . . CAFETERIAS . . . CLASSROOMS, STUDY ROOMS and LABORATORIES OFFICES . . . CORRIDORS . . . LIBRARIES and BOOKSTACKS . . . GYMNASIUMS and OUTDOOR AREAS.

Have your architect or electrician check your lighting needs with Holophane engineers.

Holophane Company, Inc., 342 Madison Avenue, New York.
Offices also in San Francisco and Toronto. Works, Newark, Ohio.

HOLOPHANE PLANNED LIGHTING
produces the greatest amount of useful light



HOLOPHANE *at* HARVARD

Holophane

School Law

School Lands and Funds

School purposes mean anything those in charge have the right to do in regard to school purposes.—*Wright* v. *Loring*, 263 Ill. App. 440.

Schools and School Districts

County school trustees are held vested with discretion to determine whether statutory power to detach territory from one school district and annex it to another should be exercised (Vernon's annotated civil statutes, art. 2742f and note).—*Prosper Independent School Dist.* v. *Collin County School Trustees*, 51 Southwestern reporter (2d) 748, Tex. Civ. App.

An order detaching territory from one school district and annexing it to another was held not invalid because leaving adjustment of indebtedness to the future (Vernon's annotated civil statutes, art. 2742f, § 2).—*Prosper Independent School Dist.* v. *Collin County School Trustees*, 51 Southwestern reporter (2d) 748, Tex. Civ. App.

The finding of a county judge that a petition was signed by sufficient qualified voters to authorize an election on the question of consolidating school districts was held conclusive as against an attack made in *quo warranto* proceedings after an election and the rendition of a consolidation order (Vernon's annotated civil statutes, art. 2806).—*State* v. *Lester*, 50 Southwestern reporter (2d), 386, Tex. Civ. App.

School-District Government

A school board of a first-class district was held impliedly authorized to prescribe requisites of general meetings (Oreg. code of 1930, §§ 35—1009, 35—1101, 35—1105, 35—1115).—*Stoddard* v. *District School Board for School Dist. No. 91 in Jackson County*, 12 Pacific reporter (2d) 309, Oreg.

A meeting of a school board called for a special purpose is a "special meeting."—*Stoddard* v. *District School Board of School Dist. No. 91 in Jackson County*, 12 Pacific reporter (2d) 309, Oreg.

The "regular meeting" of a school board is one convened at stated time and place pursuant to a general order, statute, or resolution.—*Stoddard* v. *District School Board for School Dist. No. 91 in Jackson County*, 12 Pacific reporter (2d) 309, Oreg.

School-District Property

A school district had authority to employ counsel to bring suit for school taxes.—*Harding* v. *Raymondville Independent School Dist.*, 51 Southwestern reporter (2d) 826, Tex. Civ. App.

A school district cannot escape responsibility for gross negligence of its contractor in burning rubbish (Remington Complete Statutes, § 5647).—*Babcock* v. *Seattle School Dist. No. 1*, 12 Pacific reporter (2d) 752, Tex. Civ. App.

That a school district is supported by public taxation affords no ground for relieving it of responsibility for gross negligence of the contractor resulting in fire damage (Remington Complete Statutes, § 5647).—*Babcock* v. *Seattle School Dist. No. 1*, 12 Pacific reporter (2d) 752.

School-District Taxation

A statute authorizing a taxpayer's suit to recover money unlawfully expended by public officers, boards, or commissions, restricts the right to recover to mentioned instances (Mich. public acts of 1929, No. 94).—*Culver* v. *Brown*, 243 Northwestern reporter 10, Mich.

The money paid by a school district for authorized services and supplies could not be recovered, notwithstanding the school district director furnished the services and supplies (Mich. complete laws of 1929, § 7692; Mich. Public Acts of 1929, No. 94).—*Culver* v. *Brown*, 243 Northwestern reporter 10, Mich.

Teachers

In the absence of a statute to the contrary, a school board, if authorized to employ teachers, has a right to exercise that superiority at any regular meeting.—*Stoddard* v. *District School Board for School Dist. No. 91 in Jackson County*, 12 Pacific reporter (2d), 309, Oreg.

Under a statute authorizing a school board "at a general or special meeting called for that purpose" to hire teachers, teachers could be hired at regular meetings, without giving notice of purpose thereof (Oreg. code of 1930, 35—1105).—*Stoddard* v. *District School Board for School Dist. No. 91 in Jackson County*, 12 Pacific reporter (2d), 309, Oreg.

In the absence of a statutory or constitutional provision, restricting the power of a school board to make contracts for teachers' services to those contracts only which conform to the budget, such restriction could not be implied.—*Stoddard* v. *District School Board for School Dist. No. 91 in Jackson County*, 12 Pacific reporter (2d) 309, Oreg.

A statutory right to bring a proceeding regarding the amount of a school budget was held not to imply that pending such proceeding, the school board could not hire teachers (Oreg. code of 1930, § 35—1009).—*Stoddard* v. *District School Board for School Dist. No. 91 in Jackson County*, 12 Pacific reporter (2d) 309, Oreg.

A teacher's refusal to prepare her pupils for a contest was held no ground for discharging her from employment for the ensuing term (Mo. revised statutes of 1929, § 9210).—*Burns* v. *School Dist. of Desloge*, 50 Southwestern reporter (2d) 677, Mo. App.

The service of a written notice from a school board dispensing with services, received by a probationary teacher before June 10, was held valid, though the clerk sent the notice by unregistered mail (Calif. school code, §§ 5.681, 5.682).—*Volandri* v. *Taylor*, 12 Pacific reporter (2d) 462, Calif. App.

Language reasonably understood to mean tenure as a probationary teacher has been terminated, is sufficient notice of the termination of such teacher's service (Calif. school code, §§ 5.681, 5.682).—*Volandri* v. *Taylor*, 12 Pacific reporter (2d) 462, Calif.

A notice informing a probationary teacher that he was not reëlected as a member of the faculty was held sufficient notice that his services as a teacher had been terminated (Calif. school code, §§ 5.681, 5.682).—*Volandri* v. *Taylor*, 12 Pacific reporter (2d) 462, Calif.

LAW AND LEGISLATION

♦ The Superior Court at Oakland, Calif., has recently rendered a decision to the effect that school teachers may no longer be classified as substitutes after they have served three years in the local schools. The court ordered a writ of mandate against the Oakland school district and the board of education in favor of Miss Elsie H. Morton, who had demanded that she be appointed as a permanent teacher. Miss Morton had testified that although she had taught three school years, she had been classified as a substitute, and had been discharged at the end of each year and reëmployed at the beginning of the succeeding year.

The court ruled that the board of education cannot deny classification as a permanent teacher to substitutes who have served the necessary time.

♦ The attorney general of the State of Washington has given a legal opinion, in which he holds that high-school graduates who desire to attend high school must be admitted, but that the high school cannot establish special classes above the high-school grade for such pupils. He has also held that the attendance of such pupils can properly be counted for the apportionment of state and county funds.

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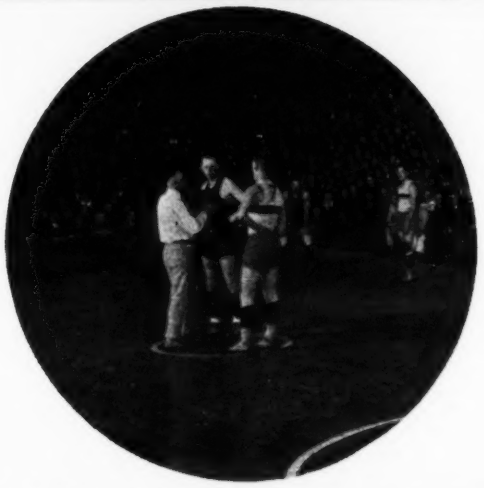

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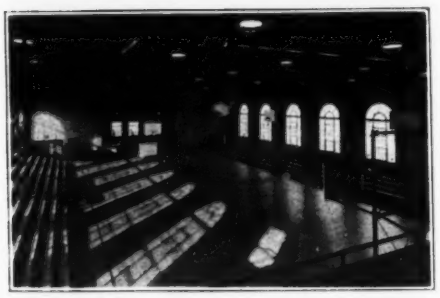

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School Administration Notes

ENROLLMENT IN HIGH SCHOOLS DOUBLES IN DECADE

The U. S. Office of Education, in a statement issued on October 6, declares that the enrollment in high schools has increased approximately 100 per cent in the last decade. There were 2,200,389 pupils enrolled in high schools in 1920, as compared with 4,399,422 in 1930. The increase has been attributed to the movement to keep adolescents in school rather than encourage them to enter employment at too early an age. The total enrollment for all levels of the public schools, it was estimated, would exceed 31,000,000 this year.

While the high-school enrollment has increased nearly 100 per cent during the decade, the elementary-school enrollment has increased only 10 per cent. The increase in enrollment in first grade was only 3.9 per cent. A decrease in the birth rate means that the decade 1930 to 1940 will find the elementary-school enrollment stationary or decreasing. The nation as a whole will not need to build more and more schools to supply an ever-increasing demand, but will need only to finance the replacement of old buildings.

Only 10,176 more elementary children enrolled in 1930 than in 1928. During this period, however, the high-school enrollment jumped nearly half a million.

SCHOOL ADMINISTRATION

♦ Dodge City, Kans. The school authorities have adopted a policy of creating more interest in intramural sports and less in interschool contests. Last season 280 boys in the junior and senior high schools took part in football and basketball, and it is anticipated that a larger number will take part in these sports this year.

♦ Carrollton, Mo. The board of education has adopted a rule, requiring that all teachers must pass a physical examination. Each teacher must present a certificate of health signed by a competent physician. The rule was passed in the interest of both pupil and teacher.

♦ Springfield, Ill. The school board has adopted a cadet system for teachers, to replace the former system of substitute teaching. Under the new plan, a number of inexperienced local teachers will be employed as cadets, to do all the substitute teaching and to work full time, at a salary of $50 a month. When not employed in substitute work, such teachers will assist the regular teachers in any work which may be assigned to them. The new plan is expected to effect a substantial saving in salaries for substitute teachers.

♦ Shelbyville, Ill. The hourly plan of class periods has been inaugurated in the high school this year in place of the former 45-minute class period. The change has been made as a means of improving the service of teachers and of better meeting the needs of students.

♦ Portsmouth, Ohio. The program for the high school during the current school year has been rearranged, with eight period classes of 45 minutes in place of seven. The change was made because of a situation which had arisen due to a large increase in enrollment and a decrease in the teaching staff. All of the eighth-grade students were enrolled as freshmen, while a large number of last year's graduating class returned to take postgraduate work.

♦ Madison, Wis. The school board recently rejected a proposal of the auditing committee, for placing $624,000 in school insurance in the state insurance fund. The handling of the insurance has been placed in the hands of the insurance committee for apportionment among the stock companies and mutuals as in the past. It was claimed that the insurance could be placed with the state fund, at a saving of 49 per cent in premiums.

♦ Superior, Wis. The public schools of the city opened for the fall term, with an enrollment practically equal that of 1931. The high schools reported a slight gain in enrollment, while the elementary schools had a corresponding decrease in enrollment.

♦ Supt. H. R. Peterson, of International Falls, Minn., has recently issued his annual report for the school year 1931–32, in which he calls attention to some of the important activities and accomplishments of the schools during the past year. During the year, the schools witnessed a major accomplishment in the revision of the junior-high-school program of studies. The new program calls for an enrichment of the course of study, a development of group activities and auditorium periods, and a new schedule for high-school classes offering six one-hour periods in the school day.

During the year a total of 1,569 pupils were enrolled in the schools, of which 691 were enrolled in the Falls High School, 318 in the senior high school, and 373 in the junior high school.

♦ New York, N. Y. Renewed contributions of the school staff to the school relief fund amounted to $150,000 at the reopening of the schools in September. The contributions were made from the August checks of the teachers and will be used to provide food and clothing for needy school children. The contributions represented 70 per cent of the monthly amount contributed prior to last June.

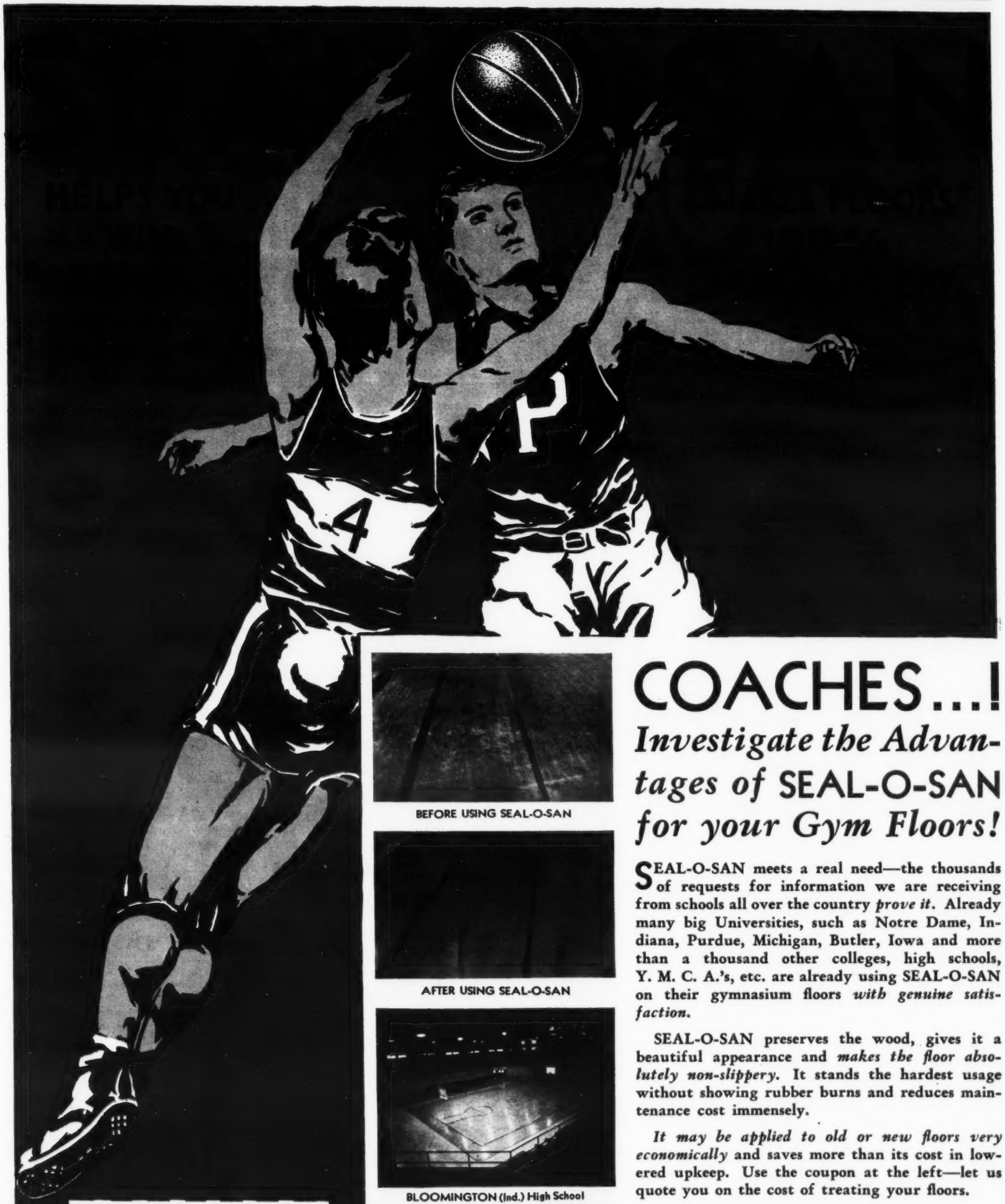
♦ A junior high school as part of a dual system has been conducted in the Dolton School District of Dolton, Ill., for the past four years. The junior high school is located in the Lincoln School, and the grade-school board receives tuition from the high school for these pupils. All eighth-grade graduates are permitted to choose as between the local ninth grade, or the township high school at Harvey. While only 12 chose to remain the first year, last year the number was 31, and this year the number had reached 51, or more than 50 per cent of the eighth-grade class. The total enrollment of the junior high school is 130.

♦ Mendota, Ill. The hour plan and unit assignment of work has recently been adopted as an economy measure and an educational project. The plan requires a reduced number of teachers since the science teachers do the same work in five periods that was formerly done in seven. Some of the advantages claimed for the plan are a better chance to make up work, assignment of work for individual differences, better supervision of study in the particular subjects, requires less homework, offers better contact of teacher and pupil, takes better care of the poor student, and eliminates lost motion in recitation and study hall.

♦ Supt. H. Claude Hardy, of White Plains, N. Y., has completed arrangements with Station WFAS of White Plains, for broadcasting a series of lectures on educational subjects. Superintendent Hardy will speak each Wednesday afternoon on various subjects of interest to his wide circle of listeners, and if the plan proves successful, other speakers and topics will be introduced.

♦ The public schools of Mendota, Ill., have recently obtained the use of a fine community athletic field which was completed and made ready during the past summer. The field, which is 7½ acres in size, comprises a turtle-back field, a quarter-mile running track, and two 40-yard straightaways. The field was purchased last October and was prepared for use at a total cost of $15,000.

♦ Douglas, Ga. The junior-high-school organization was placed in complete operation in the white schools this year. The junior high school has a separate organization, with a modern course of study and modern methods of procedure.



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Teachers' Salaries

♦ The Chamber of Commerce of the State of New York has received a report recommending that mandatory salary schedules of teachers and other employees be eliminated by legislative action, unless those affected take voluntary pay cuts. The report recognized that "while expenditures for public education constitute a major item in local and state taxation, educational services are second to none in public importance, and their efficiency must not be impaired.

After stating that salaries for teachers have increased approximately $31,400,000 in the past six years, the committee pointed out that ways of retrenchment in the educational budget are the effecting of economies by means of the most careful handling of the purchase, distribution, and economical use of educational and administrative supplies and textbooks; the reorganization of the custodial service; the reclassification and standardization of clerical service; the elimination of all unnecessary positions in the administrative staff; and the elimination of unnecessary supervisory positions.

♦ Seattle, Wash. The school board has accepted an offer of the teaching staff to donate three weeks' work in lieu of taking an additional cut in their salaries. A total of 2,005 teachers and 250 other school employees are affected by the compromise, which is equivalent to a cut of 6 per cent in salaries. The teachers had previously suffered an 11-per-cent salary reduction. The total saving as a result of the reductions will reach $300,000.

♦ San Francisco, Calif. The school board has started to pay $85,000 due the school teachers under a supreme-court judgment as back pay.

♦ Joliet, Ill. The school board recently paid out $109,484 in cash to the school teachers and other employees. The money for the salaries was obtained through the sale of $80,000 worth of bonds. The bonds were disposed of on terms that the proceeds could only be used for clearing up the board's indebtedness and which prevented their application to future obligations.

♦ Manchester, N. H. The school board has adopted a resolution, providing for a 10-per-cent cut in teachers' salaries, beginning with January, 1933. The reduction was made necessary by a cut in the appropriation for the school year 1933.

♦ Lewiston, Me. The school board has voted to reduce the pay of substitutes. Substitutes in the high school will be paid $4 per day in place of $5, and those in the grades, $3 instead of $4.

♦ Aurora, Ill. The east side school board has accepted an offer of the teachers and school employees to teach without pay for two months as a means of assisting the board in meeting its budget. The donation of service represents an additional cut of 16⅔ per cent in salary, making a 25-per-cent cut from the salaries of last year. The action became necessary after the real-estate valuations had been cut by order of the board of review, which resulted in a substantial cut in school revenue after the budget had been prepared. It was voted to maintain a school year of ten months.

♦ Dr. Abraham Lefkowitz, legislative representative of the New York City teachers' union, speaking recently over the radio in New York City, warned against reducing teachers' salaries, holding that pay cuts tend to undermine educational standards. He pointed out that the movement to decrease salaries is contrary to sound public policy and is an unsound educational policy.

For years, said Dr. Lefkowitz, educational leaders have striven to attract to the teaching profession the highest type of men and women. Today, more than ever before, we need teachers of greater ability, wider culture, greater sympathy and understanding, and broader tolerance.

♦ El Reno, Okla. The school board has adopted a sliding salary scale, providing for reductions of from 8 to 12 per cent in teachers' salaries. Under the schedule, teachers receiving a salary of $975 or less a year were given an 8-per-cent decrease, while those receiving from $975 to $1,499 were cut 10 per cent. Those receiving more than $1,500 were reduced 12 per cent.

♦ Chicago, Ill. School employees recently received checks for two weeks of their overdue pay. The money was obtained following the completion of a tax-warrant arrangement with the banks.

The checks, which were for the first half of the month of April, amounted to a total of $2,401,220, of which the board received $2,155,000 through the sale of tax warrants. The school board gave the city 1932 tax warrants, and the bank took 1931 school warrants which were held in the city treasury.

Teachers and Administration

♦ Somerville, Mass. The school board has changed its rules governing the compensation of teachers. Under the rules, the payrolls will in the future be prepared by the secretary of the school board on the 24th day of each month, for an amount equal to one twelfth of the annual salary. The payroll will then be sent to the city auditor, and from there it will go to the mayor, who will certify as to its correctness, and then sign a warrant drawn by the auditor for the city treasurer to pay the amounts. Payment of the amounts will be made by the city treasurer on the 28th day.

♦ Galveston, Tex. The school board has adopted a rule, providing that the marriage of a woman teacher shall result in the immediate termination of her contract. At the same time, the board reëlected under their married names, three teachers who had taken advantage of the interpretation of the original regulation and married a few days before the rule was voted upon. The problem created by the situation remains unsolved up to the present time.

♦ Putnam, Conn. Teachers who were employed last year and whose salaries were in excess of $3,000 have pledged an amount over $3,000 to aid the town in the relief of the unemployed. This amount, together with the $2,100 saved last year by the replacement of teachers, makes a total saving of 10 per cent in teachers' salaries.

♦ Chicago, Ill. Proposals calling for a general strike unless back salaries were paid, were recently defeated at the hands of the High School Teachers' Association in a conference of teacher delegates from 100 schools on the west and north sides of the city.

♦ Seattle, Wash. The teaching staff of the city schools has entered into an agreement with the school board to donate three weeks of service without pay in lieu of another salary cut. The teachers had previously taken a salary cut of 11 per cent.

Alderman Mills counseled the teachers to wait a while longer, pointing out that the tax feature of the N. S. F. check law which has prevented the sale of school-tax warrants is to be repealed. He urged the

(Concluded on Page 63)

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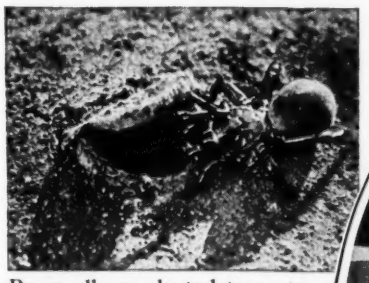

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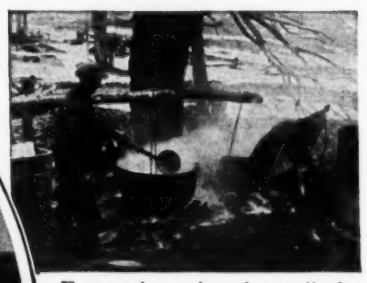

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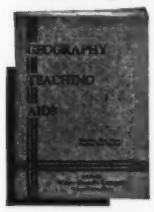

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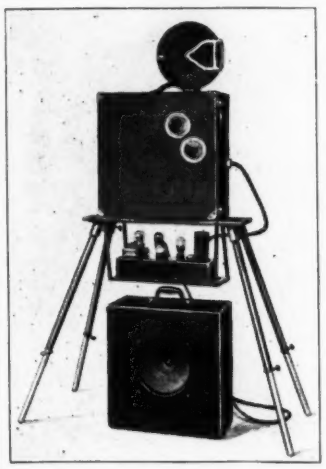

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The Spencer No. 64 Microscope is just such an instrument. It is built simple and durable—precise enough for elementary work in biology, botany and zoölogy and tough enough to stand years of rough usage. It is low in cost.

Folder M-52 gives a complete description of this Spencer No. 64 Microscope—a fool-proof microscope for student use. Write for your copy now!

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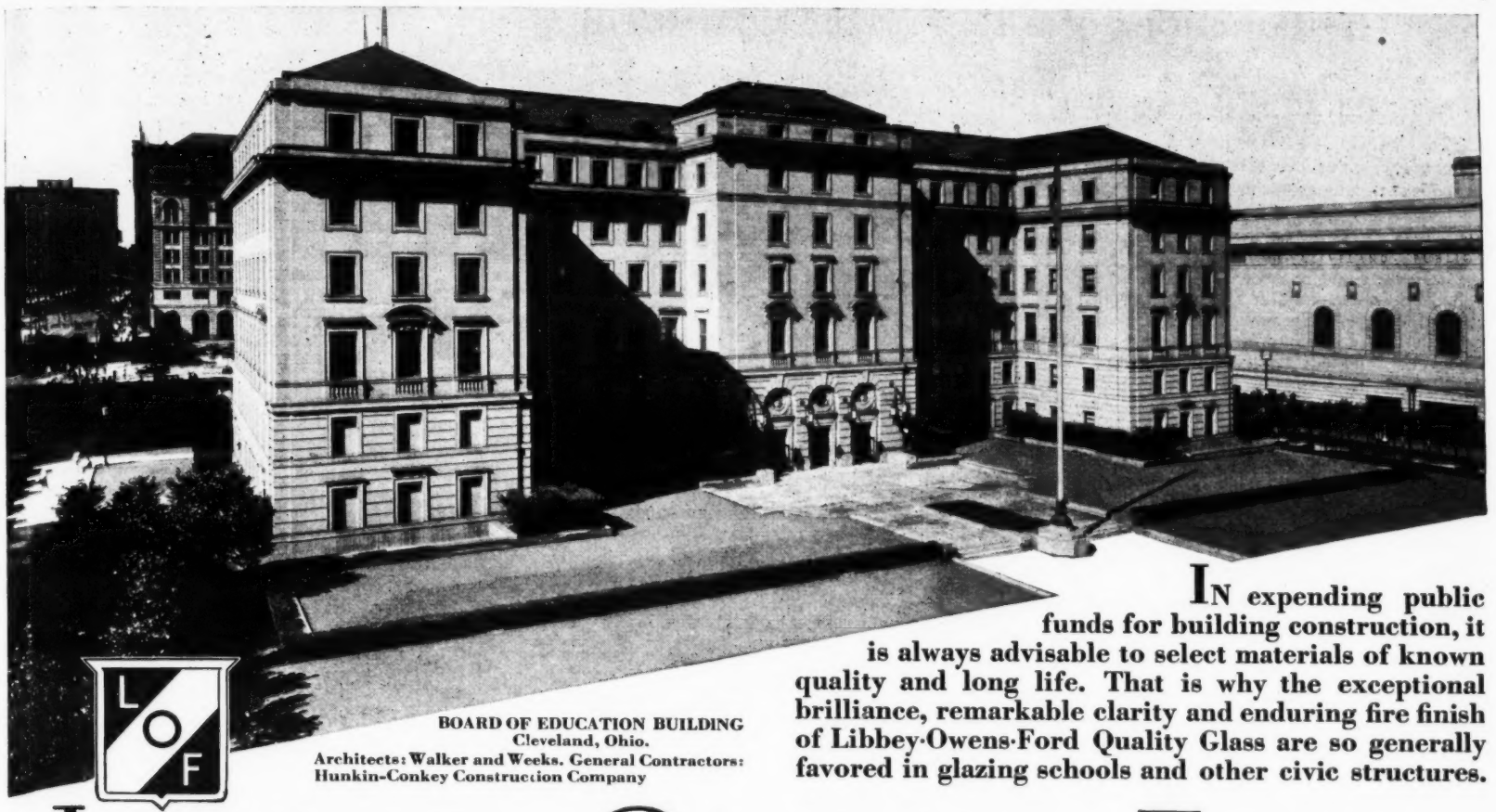


BOARD OF EDUCATION BUILDING
Cleveland, Ohio.
Architects: Walker and Weeks. General Contractors: Hunkin-Conkey Construction Company

IN expending public funds for building construction, it is always advisable to select materials of known quality and long life. That is why the exceptional brilliance, remarkable clarity and enduring fire finish of Libbey·Owens·Ford Quality Glass are so generally favored in glazing schools and other civic structures.

LIBBEY·OWENS·FORD QUALITY GLASS

LIBBEY-OWENS-FORD GLASS COMPANY, TOLEDO, OHIO, *manufacturers of Highest Quality Flat Drawn Window Glass, Polished Plate Glass and Safety Glass; also distributors of Figured and Wire Glass manufactured by the Blue Ridge Glass Corporation of Kingsport, Tennessee.*

(Concluded from Page 60)

teachers to wait and see what the bankers would do in the matter. A calm and serious discussion of the matter resulted in a motion to vote against the strike proposal.

♦ Wausau, Wis. The school board has accepted an offer of the teaching staff to contribute 5 per cent of their salaries for one year. The action was taken to assist the board in balancing its budget.

♦ Chelsea, Mass. The school board has discussed a proposed plan, requiring all teachers to reside in the city. While the question was referred to the rules committee for action, it was the general sentiment of the members that all teachers in the future should be compelled to establish homes in the city.

♦ New York, N. Y. Teachers in the city schools who resign and who later seek reëmployment in the schools are entitled to benefits accorded them by the by-laws at the time they resigned, according to a ruling made recently by Corporation Counsel Arthur J. W. Hilly. The ruling may have the effect of inducing scores of teachers who had resigned and who had believed that the amended by-laws make them ineligible for immediate reinstatement, to seek their former positions.

For a number of years, teachers who resigned could, at the discretion of the board of superintendents, be reinstated in their old positions regardless of the eligible lists, provided they applied for reinstatement within ten years. The rule was changed two years ago, so that preferential appointment for resigned teachers was abolished, and they were forced to take special examinations and were placed at the bottom of the eligible lists to wait their turn for appointment.

♦ The second step in the advanced standards for the certification of teachers in the State of Washington became effective in September, 1932, with the result that training for certification to teach in the elementary schools is now two quarters beyond the standard two-year normal-school course. The training required for teaching in the high schools is two quarters beyond the standard four-year college or university course.

The life certificate now requires one quarter of training, in addition to that stated above, or three years of normal-school preparation for the elementary certificate, and five years of college or university preparation for the advanced life certificate in the high school.

Holders of advanced certificates, with college or university training, and holders of elementary certificates, with three years of normal-school training, are eligible for work in the junior high schools.

♦ Aurora, Ill. The school board has accepted an offer of the east-side teachers to teach two months without pay in order that the school term need not be shortened due to a lack of funds. The action amounts to a 16⅔-per-cent reduction in salaries and is a 25-per-cent reduction from the salaries of last year. All school employees will be affected and the total savings will be approximately $50,000.

♦ Boston, Mass. Twenty teachers who refused to contribute voluntarily from one to three days' pay a month to aid the unemployed of the city have had equivalent sums deducted from their pay checks, under a recent order of the school board. The request for voluntary contributions, made by the mayor, had been recommended by the school board. All of the teachers, with the exception of twenty, agreed to the contributions.

♦ Marshall, Tex. All city and county teachers have suffered reductions in salary for the current school year, due to a lowering of the per-capita apportionment from $17.50 to $16 for the year. City teachers received a 10-per-cent salary cut, while county teachers suffered reductions ranging from 7½ to 10 per cent.

THE TEACHERS' TASK IN THE PRESENT SCHOOL YEAR

Teachers in the Denver schools, recently assembled in the East High School, heard prominent school executives urge them to greater effort in the new year and laud the profession as the most noble and honorable in the world.

Mr. C. M. Schenck, president of the board of education, speaking to the teachers on the topic, "The Joy That Should Be the Teacher's" said in part:

"The fact that today many boys and girls in our land who should be experiencing a happy childhood are feeling the results of the present economic stress, gives this old axiom a new and present-day application. Our country is passing through one of the longest and worst depressions in its history. How are these times affecting the youth intrusted to our care? At home, on the streets, in the papers they hear of the unemployed, the hungry, and the destitute.

"The alert, progressive teacher has pupils who are willing and anxious to go forward. The cheerful, pleasant atmosphere of the schoolroom may be attributed to a pleasant, cheerful teacher and this influence carries over into the community, for the progressive teacher is taking a keen interest in local affairs.

"To be sure, teachers, too, are feeling the effects of the depression, and everywhere we find them taking an active part in furnishing financial assistance for the unemployed.

"However, the real teacher's task today is a bigger one. She must forget her own personal problems and she must try to make up to her pupils for the lack of cheerful home environment in these days of their childhood. Let the schoolroom be an example of cheerfulness and faith. This is the big task facing the classroom teacher of 1932."

BERKELEY, CALIFORNIA, USES RADIO

An experiment in radio education, the first of its kind, has been started, with an arrangement with the radio station KYA, for broadcasting arithmetic lessons over the radio. The project has been begun with pupils of the low fifth and sixth grades of the Berkeley, Alameda, and San Francisco schools, with Miss Ethel Batchelor, teacher of the Oxford School at Berkeley, in charge.

The experiment is the result of a coöperative arrangement sponsored by Supt. L. W. Smith, of Berkeley, Supt. W. E. Givens, of Oakland, Supt. W. G. Paden, of Alameda, and Supt. J. M. Gwinn, of San Francisco.

Under the arrangement, regular half-hour broadcasts will be given once each week by master teachers of the four cities to pupils of the low fifth and sixth grades of the four cities. Each city in turn will give a half-hour program of two 15-minute periods. The lessons will be presented on Tuesday and Friday, with the National Broadcasting Company furnishing the facilities without cost to the coöperating systems.

♦ Cleveland, Ohio. Under a ruling of the assistant attorney general, the school board is permitted to furnish milk and other food to parochial-school children who are in need. It is estimated that $11,600 will be required to supply food to these indigent pupils during the remainder of the year.

♦ Dayton, Ohio. The public schools of the city will go on a full-time schedule before the first of the year, according to Supt. C. V. Courter. The school board has been informed that it will receive $1,446,026 from the county auditor as its share of the August tax money, which will relieve the financial situation in the schools.

♦ Nekoosa, Wis. At a recent election, the voters defeated a proposal, calling for a seven-member school board in place of the former three-member body.

The Functions of a Research Department

(Continued from Page 50)

other mental and educational standard tests.

7. The Teaching and Supervisory Staff

Possible Special Assignments

a) Definite objectives in supervision.

b) Measuring the results of supervision.

c) The size of classes.

d) The teaching load in all schools.

e) Absence and lateness of teachers.

f) Supporting and stimulating the research attitude among teachers and principals by providing reference materials and coöperating in individual research problems.

g) Measuring the efficiency of the board's machinery for developing the staff.

h) Facts about the individuals composing the staff, such as its training, experience, distribution as to age and sex, social composition, and growth in service.

i) Study extracurricular activities of teachers and principals.

Routine Assignments. None.

8. Methods of Learning and Teaching

Possible Special Assignments. The possibilities may be indicated by mentioning —

a) Remedial teaching in specific phases of schoolwork.

b) Clearly defined goals and measured progress in teaching.

c) Facts about the efficiency of teaching.

d) The desirability of individualization of instruction, the establishment of special classes and their effectiveness.

e) To what extent are textbooks and reference materials adapted to the methods of teaching in use?

Routine Assignments. None.

9. Child Accounting, School Enrollment, Attendance

a) Estimates of enrollments for budget and other purposes.

b) Per cent of enrollments in high-school courses.

c) Causes of irregular attendance and progress.

d) Rate of growth in school population, with reference to entire city, and also in locating new building sites.

e) Help evaluate the elements which should determine the promotion of children.

f) Character and extent of nonattendance of children of school age.

g) The school census and its effectiveness.

Routine Assignments

a) Monthly statisticals.

b) Age-Grade statistics.

c) Grade-Progress statistics.

10. Promotion; Retardation; Elimination

a) Careful individual studies of cases of retardation, to determine their disposition.

b) What facts, processes, and skills children fail to learn.

c) How much children learn in a given period.

d) How different types of children succeed.

e) In what directions others fail.

f) Why pupils fail or succeed.

Routine Assignments. None.

11. Pupil Supervision

Possible Special Assignments

a) Classification of pupils in all grades.

b) Coördinate and direct the work of student placement, and build up records for follow-up of all students placed in positions.

c) Continuation histories of graduates.

d) A study of the administration of high-school scholarships — do they go to the most needy cases?

Routine Assignments. None.

12. Health

Possible Special Assignments

a) Is the health instruction accomplishing its purposes?

b) Medical and dental service — the needs and activities.

c) Instruction of the physically handicapped.

d) The conduct and results of athletics in all schools.

Routine Assignments. None.

13. Guidance

Possible Special Assignments

a) Provide general supervision for all guidance service in the schools.

b) Studies of individual differences in children.

c) Vocational and occupational information.

Routine Assignments. None.

14. Miscellaneous (not previously mentioned)

Possible Special Assignments

a) Preparing pamphlets on homeroom duties.

b) A study of the system of grades and marks to determine

(1) Efficiency of the plan in use.
(2) What the marks measure.
(3) What use is made of the marks.
(4) Relative distribution of the marks assigned by various teachers in the different subjects.

c) Anticipated state legislation, and the adjustments necessary to meet new laws.

d) Investigation of the handwriting procedure in the schools.

e) The transportation of school children within the city.

f) The placement of girls in industry.

g) Studying the migratory school population in certain sections of the city.

h) Editorial assistance to other departments in the preparation of articles for the press.

Routine Assignments

a) Compiling data for questionnaires.

Addenda

Additional interesting items from other policies and programs, but not included with this schedule:

1. Select one school and work out its problems first.

2. Advance costs on proposed changes or experiments.

3. Comparative costs of two or more types of organization.

4. One city uses one teacher in each school as a local primary examiner, and one as a local intermediate examiner.

5. Results of each study or survey presented to the administrative conference by means of lantern slides and orally.

6. Preparing all routine and cumulative tabulations made from school records of reports to county, state, and federal officials.

7. During the school year ending June 30, 1925, the typical bureau of research in city school systems engaged in the study of seven distinct projects, four of which were special problems of research, and three were routine studies or services.

8. "In general, those bureaus which have studied one large problem, such as pupil adjustment, until a reasonably satisfactory solution has been reached, appear to have attained outstanding success."

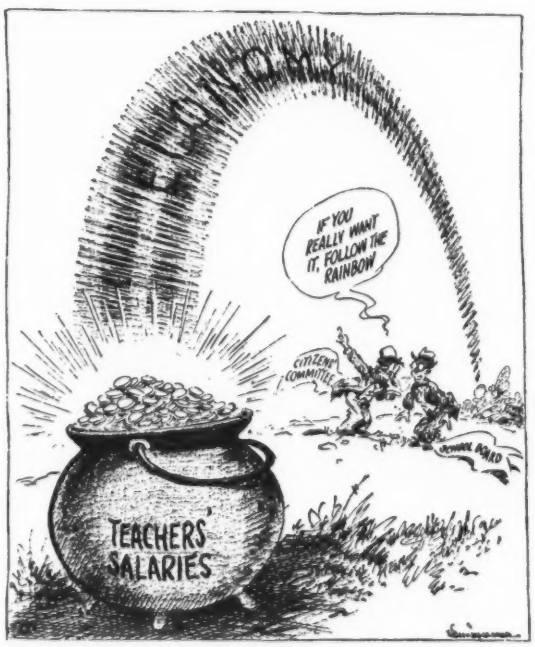
9. Relation of city's wealth to the educational expenditure.

10. Suitable salary schedules.

11. Age groups and school costs.

12. Age and sex groups and the earning power of the city.

13. A satisfactory plan of finance.



THAT POT OF GOLD—*Chicago News.*
At what cost to the children of America is it sought?

14. Cost of buildings and insurance.

15. Cost of bonding.

16. Types of credit financing.

17. Sources of income and depreciation.

18. The cost-accounting program of the business department.

19. Allocation of costs by schools.

20. Analysis of the budget.

21. Devising ways and means of reducing time and labor costs.

22. Files of all budgets.

23. Tables and graphs showing tax rates and income by sources, expenditures, total and by schools, departments, and budget divisions through the years.

24. Figures on taxable and real wealth.

25. Figures on value of school plant and equipment.

26. Figures on debts outstanding.

27. Figures on sinking funds.

28. Study methods of heating.

29. Study kinds and efficiency of janitorial service.

30. Development of an administrative code.

31. Classification of the members of the staff, based upon a careful study of the functions to be performed, and the best ways of performing them.

32. Build up a sound organization.

33. The legal phases of the school system.

34. Racial composition of the population.

35. The problem of literacy within the school system.

36. Age distribution of the population.

37. A complete file of building plans and photographs.

38. Lists of permanent apparatus.

39. Detailed organization chart showing every main group of functions and all the offices responsible for them.

40. Sketches of floor plans for all buildings, showing used areas, seating plans, etc.

41. Members of staff in each building, and number of children provided for.

42. Proper use of clerical service in schools.

43. Administrative charge of (*a*) attendance; (*b*) appointments.

44. Devising schemes for reporting compilations back promptly to administrative heads.

45. Programs for exceptional and bright children.

46. Instruction of physically handicapped.

47. Experiments in open-air rooms.

48. Experiments in opportunity classes.

49. Experiments in ungraded rooms.

50. Experiments in special adjustment rooms.

51. Types of schools.

52. Classroom equipment.

53. Placement of school buildings.

54. Seating and other permanent equipment.

55. Working out new forms.

56. Classifying children of foreign parents.

57. Selection of experimental and control groups.

58. Vocational testing in vocational and prevocational schools.

59. Principals' building tests.

60. Preparation and scoring of the professional examinations of all candidates for teaching positions.

61. All vital statistics concerning teachers, their preparation, experience, and work.

62. Professional stimulation and guidance to teachers and principals.

63. Visit principals and give assistance in the construction and administration of group tests, and in the analysis and interpretation of results.

64. Pupil intelligence, social heredity, and home life.

65. General charge of attendance and general welfare service.

66. Attendance and child-labor laws.

67. Attendance machinery.

68. Tenure rules.

69. Local retirement and pension provisions.

♦ Seattle, Wash. A comparison of this year's attendance figures with those of last September, shows a decline of 1,374 in elementary-school enrollment. Junior- and senior-high-school enrollments show an increase of 1,085, which has been attributed to more pupils remaining in school and a greater number returning for postgraduate work. It is estimated that, by the end of the year, the number of postgraduate students will reach 1,000, unless economic conditions improve very rapidly. Last year there were 500 postgraduate pupils in the high school.

They need not suffer even though school budgets may be cut!

Modernizing that school executives will find economical and efficient

COURAGEOUS cooperation is maintaining America's high standards of educational progress. Educators—school officials—Parent Teacher organizations—and parents themselves are working hand in hand that schools may function with unimpaired efficiency though school expenditures may be curtailed.

If Education reaches a standstill—progress will cease. Thus, today's budgets which call for readjustments should nevertheless provide for modern equipment—modern teaching tools.

School executives, always conscious of the pupil's mental and physical welfare, have found a way to avoid penalizing children due to economic ills. Even though school budgets may be cut, pupils need not suffer. So in 1932 budgeting provision is made for modern, posturally correct seating and desks even if funds do not permit new buildings. In that way classrooms are modernized without costly expenditure and within available funds. Pupil health and efficiency is safeguarded, for authorities agree that posturally correct seating—seating that makes it easy and natural for the pupil to sit erect—is a primary factor in the health of the pupil during the long school day, and an aid to his mental alertness.

Educational authorities make a place in their budget for maintenance and replacements. Much of this appropriation is usually applied to new seating. So each year a number of classrooms are brought up to the most efficient seating standards. For a relatively small annual expenditure in comparison to the total cost of education, they are enabled to give students seating that is posturally correct and a definite aid to their health and efficiency.

Superintendents, principals and teachers are invited to write us (or use coupon) on matters pertaining to seating and posture.

For the sake of your pupils modernize your school where it means most to them and costs least to the community.

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( ) The Relation of Posture to Tuberculosis
( ) Ideals and Standards of Classroom Seating
( ) The Buying of School Equipment ( ) Forty Years of School Seating

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Gradually, schoolmen all over the country are coming to recognize the fact that a slightly higher initial cost is frequently the most economical in the long run.

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No. 260

Send for a copy of our catalog, or, if you have any special problems we shall be glad to assist you in working them out.

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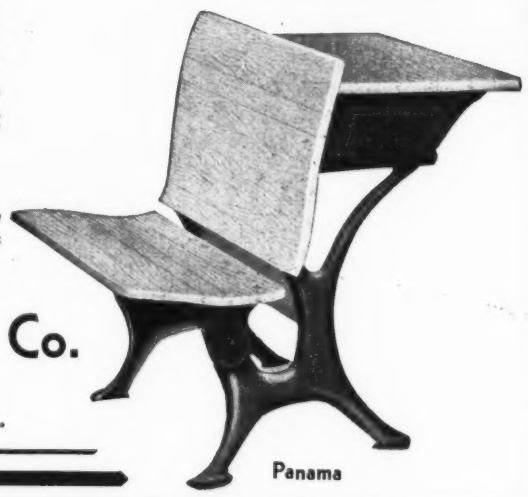

Panama

School Finance and Taxation

SCHOOL FUNDS IN UNITED STATES TOTAL HALF BILLION

The U. S. Office of Education, in its biennial survey of state education systems recently issued, shows that permanent school funds in the United States total almost $500,000,000. Receipts from this source are in excess of $23,000,000 annually.

Minnesota, it was shown, ranked first among the states with over $64,000,000, and Texas follows with over $50,000,000.

In 1930, the total amount of permanent school funds was approximately $484,575,199; Minnesota leads with $64,187,316; Texas follows with $50,635,701; then Illinois with $47,785,067, and Oklahoma with $30,-127,550.

Of the states reporting permanent funds, South Carolina reported the least, $66,756. The state permanent funds amounted to $409,333,397, the county to $23,568,243, and the local to $51,673,559. From 1928 to 1930, the total amount reported increased from $483,496,538 to $484,575,199.

FARIBAULT BUDGET REDUCED UNDER OLD BUDGET SYSTEM

The board of education of Faribault, Minn., is dependent upon an annual school meeting for authority to conduct the schools. The situation is an interesting one, in that it involves complete mutual confidence of the community in the actions of the board and of the board in the community's willingness to support the board's action. In the case of the 1932 annual meeting, it resulted in an embarrassing situation.

The Faribault School District operated under its original charter granted in 1864. The main provisions of the charter are that the annual meeting of the district shall be held on the first Saturday in October and that the citizens shall vote upon the preparations to be made for the school term. When the charter was adopted only a short winter term of school was held, and it was readily possible to engage the teachers, order the purchase of fuel, etc. For years, however, the board of education has made most of its preparations for the opening of school from four to six months before the time of the annual meeting. Contracts are issued to teachers in March; insurance policies are renewed when they expire; coal is contracted for during the summer; textbooks, supplies, and equipment are bought during the summer and have had one month's use before the time of the annual meeting. The board of education has been obliged to take it for granted that the public would ratify the board's action at the time of the annual meeting.

The budget for the current school year (1932–33) was prepared with the greatest of care last spring. A total reduction below last year's figures of more than $20,000 in tax requirements was announced. The board of education and the superintendent went to the annual meeting on October 1 confident that the budget would be ratified without a dissenting vote.

The action of the annual meeting was to decrease the proposed tax levy still further by the amount of $10,000. In other words, the school board and superintendent opened schools on the appointed date in response to the community's expectations, and obligated the district to practically the full amount of the proposed budget for such items as payroll, fuel, insurance, textbooks, supplies, and equipment. They now find themselves suddenly faced with the meeting of these obligations and a deficiency of $10,000 in the amount necessary to meet them.

PUBLIC-SCHOOL DEBTS DOUBLE IN DECADE

The United States Office of Education, in its biennial survey of state school systems, issued on September 28 and published in the *United States Daily* for September 29, shows that public-school debts increased 225 per cent during the past decade. School bonds outstanding and other forms of school debts total over $2,425,000,000 for the 48 states of the Union.

Five states have school debts in excess of $20,000,000 and 13 in excess of $50,000,000, the survey indicates. Debt per pupil in attendance increased from $54.17 in 1920 to $114.08 in 1930.

Pennsylvania has the highest debt of any state, reaching $272,795,327, but that of New Jersey is the highest per pupil in average daily attendance, totaling $321.69, compared with Pennsylvania's $164.22. The debt of New York state ranks second, Ohio third, New Jersey fourth, and California fifth.

In 1920, 34 states reported $651,930,112 in bonds and other forms of indebtedness, and in 1930, 48 states reported $2,425,796,439.

The average indebtedness per pupil in average daily attendance in 1920 was $54.17, and in 1930 it was $114.08. This is an increase of $59.91, or 110.6 per cent per pupil in average daily attendance.

In 1928, 43 states reported an indebtedness of $2,158,148,666, while the same 48 states reported $2,301,101,234 in 1930. The average indebtedness for these states per pupil in average daily attendance in 1928 was $116.08, and in 1930 it was $119.81, or an increase of $3.73, or 3.2 per cent.

NEW YORK CITY SCHOOL BOARD MAKES LARGE REDUCTION IN ITS BUDGET

New York City has appropriated for its public schools next year, approximately $5,188,000 less than it did for the year 1931–32, under a tentative budget prepared by Budget Director Kohler. Mr. Kohler has recommended an aggregate appropriation of $90,812,-000, as compared with the $96,000,000 appropriated for 1932. The present budget involves a cut of $1,420,-000 over and above a cut of more than $3,000,000 made earlier in the year. The reduction was effected by cuts in janitors' salaries and by reductions in a number of school activities.

The school board has estimated that it will receive $50,312,000 from the state next year which, added to the recommended appropriation, will give the schools a total of $141,125,000.

TEN CENTS A DAY PAYS THE SCHOOL BILL

Ten cents a day from each person of voting age in the United States would pay the entire bill for public education of almost 26,500,000 pupils and students.

This fact is presented in the statistical summary of education just released by the Office of Education.

The annual cost for publicly controlled education per adult 21 years of age and over in 1930, according to the study, was $36.42. The total cost was a little more than two and a half billion dollars.

An additional 2 or 3 cents a day for the voting population finances private education which cost slightly more than a half billion dollars in 1930. Private educational institutions enrolled 3,500,000 pupils and students.

♦ Elyria, Ohio. The school board anticipates that the calendar year 1932 will be ended with a balance of approximately $39,000 in the school treasury. A recent financial statement shows that revenues for the rest of the year will amount to slightly more than $285,-000, and that the expenditures will amount to slightly more than $245,000. The balance at the end of the year, however, will not be sufficient to carry the board through January and February of 1933, up to the regular tax time. Approximately $100,000 will be needed for salaries and $18,300 for bond and interest payments during this period.

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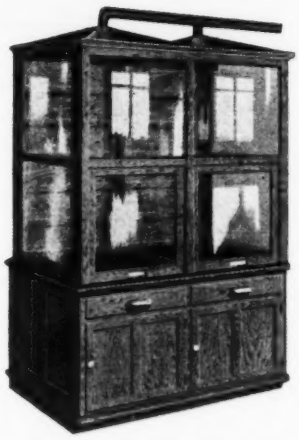

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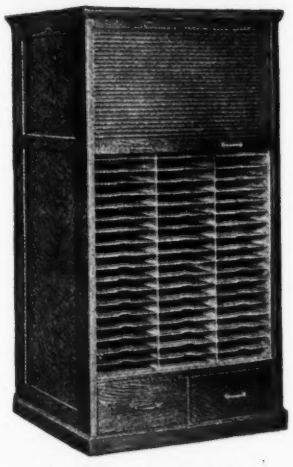

No. 9579 — Note Book Case

K

No. 880 — Instructor's Desk

K

FINANCE

♦ Grand Haven, Mich. The school board has adopted a budget of $105,000 for the year 1933, which is a reduction of $9,000 from the estimate of last year. The tax rate was lowered from $14.90 to $14.13.

♦ Fitchburg, Mass. The school board has voted to exclude postgraduate students in the high school this year, due to economy reasons. It was brought out that these students could not be handled without extra teachers, additional supplies, and more classrooms, all entailing an additional cost to the schools.

♦ Chicago Heights, Ill. The elementary schools did not open this year until late in September, due to serious financial problems attributed to the delay in the collection of taxes in Cook county. The state of the finances made it necessary to order a number of retrenchments for the new school year, which included a shortening of the school term to eight months, a reduction in the number of teachers, and a cut of $25,000 in the budget. A citizens' committee was appointed to coöperate with the board in the sale of tax-anticipation warrants upon 1932 taxes. The warrants were in small denominations and their sale was expected to bring in sufficient cash to pay the school employees at least one fourth of their salaries.

♦ Dayton, Ohio. Citizens have been appealed to by a local club for a donation of $150,000 to keep the schools of the city on full time until December 16. Meanwhile, the board of education has voted to open the schools on a three-fifths' time basis. High-school students will attend classes three days a week, and elementary students five days a week. The plans for the financial campaign are going forward and will be pushed vigorously during the period of the campaign.

♦ Decatur, Ill. Supt. William Harris has submitted a report to the school board, in which he shows that a reduction of $52,000 can be effected in the school operating expenses during the present school year. The proposed cut follows a reduction made earlier in the year and will effect a saving of approximately $125,000 over last year's expenditures. Of the total reduction, $10,000 has been effected by reductions in educational and operating supplies. The remainder will be taken from the salaries of teachers, clerks, and other school employees.

♦ Beaver Dam, Wis. The school board has adopted a budget of $107,503 for the school year 1933, which is a reduction of $15,000 from the budget of a year ago which called for $122,014. Of the total budget, $77,040 must be obtained from taxation. The reduction was effected by a 10-per-cent cut in teachers' and janitors' salaries, and a reduction in the operating and maintenance costs of the schools.

♦ Providence, R. I. The school board has begun a study of ways and means of curtailing the expense of night schools to meet a $12,000 reduction in the budgetary allowance. The appropriation for evening schools this year has been cut from $62,000 to $50,000. A part of the reduction was taken care of through salary reductions, but it will be necessary to save at least $5,000 or $6,000 additional.

♦ Meriden, Conn. Supt. Nicholas Moseley, in a financial report to the school board, has outlined a number of savings in operating costs amounting to more than $37,000 before January 1. The reduction includes the recent cuts in salaries as well as savings effected in the operation of vacation schools, fuel, textbooks, instruction, and supplies.

♦ LaSalle, Ill. The LaSalle-Peru township high-school board has voted against any further reduction in the school budget, as a result of action taken by taxpayers urging a greater decrease in tax assessments for educational purposes. The board had previously reduced the budget from $210,000 for last year, to $193,500 for this year.

♦ Decatur, Ill. The board has been able to have $1,780 worth of scrip redeemed, with the result that 29 teachers holding scrip in lieu of salary checks, have been paid in cash. The scrip will be retired serially according to Supt. William Harris. In the future, all money received from county, tuition, or state funds will be used to retire scrip held from last year.

♦ East Orange, N. J. The board of education has refused to ask the teachers and school employees to accept deductions in pay of from 1 to 10 per cent, as requested in a resolution adopted by the city council. The school officials, however, agreed to make a reduction in operating expenses for the school year.

♦ The California agricultural leaders, in protesting the proposed school-tax amendment have warned against the tremendous addition to the tax burden which such a measure would entail. The amendment, it was estimated, would compel the state to raise $45,000,000 to $50,000,000 annually for the support of public education in the state.

The proposal, it was pointed out, adds $50,000,000 a year to the state support of schools, but it fails to abolish any form of local tax, or to suggest or provide for any limitation on local taxes, budgets, or expenditures.

It leaves the way entirely open for boards of supervisors to further increase taxes for other purposes, thus defeating any possible relief which might occur from school monies being received from other sources, and does not, therefore, guarantee tax reduction at any point.

The measure is recognized as another defeat of the effort to reduce taxes to fit the present ability of the taxpayer to pay.

♦ Wauwatosa, Wis. The school board, as an economy measure, has ordered that the salaries of teachers and other school employees be reduced, beginning with January 1, 1933, such reductions to continue for one year. The reductions will not apply to all in the same measure, since no teacher receiving less than $1,300 a year will receive a reduction, nor will the salaries of teachers employed since January 1, 1932, be changed. The reductions range from 5 per cent for those receiving $1,300 to $1,799, to 12½ per cent for those receiving from $2,500 to $2,899. All school custodians will suffer a reduction of 5 per cent in salary.

♦ Columbus, Ohio. Mr. P. S. Bradford, president of the school board, has recently received communications from local taxpayers, urging that school funds be used for school purposes and the welfare of the child. Citing the personal sacrifices made through a reduction in salaries and the increased burden of extra work, the principals' association and the federation of teachers expressed an earnest desire to coöperate. Although no mention was made of expenditures outside the category of school purposes, the natural inference was that additional transportation was objected to.

The averting of a curtailment of school days or school terms, it was pointed out, is the prime duty of the board of education.

♦ The annual report of the school board of Southington, Conn., for the school year 1931–32, contains a statement to the effect that Southington has the lowest per-pupil cost for high-school students of any town in the state, with the exception of four — New Milford, Plainville, Stratford, and Woodbury.

The average per-pupil cost in the Lewis High School for the past year was $95.37, while the average cost per student throughout the state was $136.36.

Supt. H. S. Libby, in a comment, has declared this to be deplorable, because the proper training of students is far more important than taking great economic measures with the school budget. He points out that three main factors are responsible for the low per-pupil cost, namely, low wages paid to teachers, an abnormally heavy teaching load, and the absence

(Concluded on Page 71)

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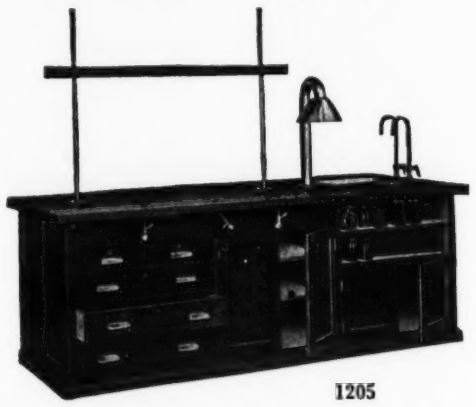

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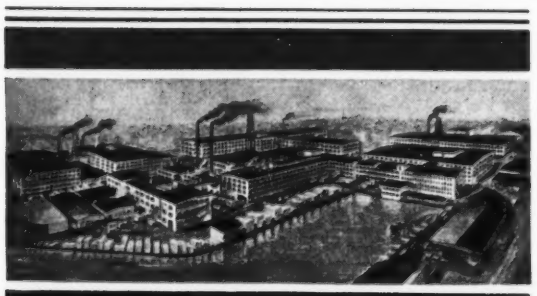

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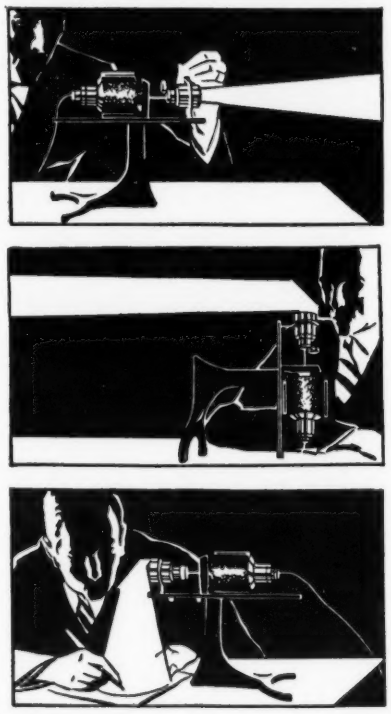

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(Concluded from Page 68)

of any special courses for students. Attention was called to the fact that the high school violates a state law by not offering a course in physical education with competent instructors.

♦ The Los Angeles board of education has sold bonds to the amount of $1,536,000 to the Bank of America. The bonds have been purchased at par and accrued interest and carry an interest rate of 4½ per cent. Plans and specifications have been completed for new buildings and additions to existing buildings amounting to over $1,000,000. Bids will be advertised for as soon as the bonds are delivered. The Los Angeles board of education has an additional unsold bond issue of six and one-half million dollars which will be used to continue the building program as requirements arise.

♦ South Bend, Ind. The board of education has decided to go before the St. Joseph county tax board, asking approval of a $1,800,000 budget for the operation of the city schools this year.

While the tax levy to raise this amount of money is 11 cents higher than last year, the board has justified its budget on the ground that cuts amounting to $422,000 have been made, and that it is the limit for reduction unless the efficiency of the school system is broken down. The retrenchment program was effected by a reduction of all salaries by 12 per cent, through a shortening of the school term, and by lowering operating costs through a shorter term and a cut in maintenance costs to a minimum.

♦ Camas, Wash. The citizens have been asked to approve a special 7-mill tax levy for school purposes. The school board has effected a reduction of approximately $10,000 in its budget for the school year, which makes possible a small reduction in the school tax.

♦ San Francisco, Calif. A complete, new financial program will be ordered for the school department as a result of the revelations of irregularities in school business matters, over- and underpayments of teachers, and inaccuracies in the school records. The action was anticipated by Dr. Joseph Marr Gwinn, superintendent of schools, in a recent statement as chairman of the school committee of the grand jury. While the superintendent and the members of the board of education withheld comment on the conditions revealed in selected records before the grand jury, Mr. W. S. Owensby, special accountant, branded the conditions as deplorable.

♦ Indianapolis, Ind. The taxpayers' plea for a radical retrenchment in governmental costs was stressed at a recent meeting of the school board called for the discussion of the year's budget. The taxpayer organizations asked that the school board adopt a salary-reduction program which would bring down school salaries and wages to the purchasing level of 1929. Other recommendations for cuts included a flat 20-per-cent reduction in the total appropriations for supplies and materials; the elimination from the budget of items for insurance; the elimination of a $1,000 item for a downtown garage rental; a $2,500 reduction in the item of transfer tuition, and a reduction in the sinking fund, not including the refunding of next year's maturities.

♦ Decatur, Ill. Supt. William Harris has outlined an economy program, calling for a reduction of from $52,000 to $53,000 in operating expenses of the schools. The cut comes on top of an earlier reduction and effects a saving of approximately $125,000 over last year's expenditures.

♦ Ottawa, Ill. The grade-school board has paid off its last outstanding tax warrant and has a cash balance on hand of $400. A year ago, when three banks closed, approximately $62,000 was tied up. Members of the school board were obliged to issue $56,500 worth of tax warrants in order to obtain funds for the operation of the school the remainder of the year. The board expects to receive $10,000 to $12,000 in tax money from 1931 taxes, and will receive dividends from the closed banks, which will enable them to operate the schools during the winter months.

♦ Terre Haute, Ind. The school board has adopted a tax levy of $1.701 for the present school year, which is a reduction of 5 cents from that of last year. The reduction in the tax levy means that all operating costs must be reduced to a lower level through the elimination of many school activities.

♦ Two Rivers, Wis. The city council has accepted the tentative budget of the school board, calling for an appropriation of $80,000 for the school year 1933, as compared with $109,600 for the past year. The council allowed an additional sum of $1,942 for part-time janitorial help and for a painting job on the high school.

♦ Bloomington, Ill. The school board has issued a tax warrant calling for $30,000 in cash, the proceeds of which will be used for the payment of teachers' and janitors' salaries and various outstanding educational bills covering the past seven months. The payment of the tax warrant is to be made through an educational fund warrant against the collection of 1933 taxes.

♦ Racine, Wis. The school board has adopted a budget for 1933, calling for an appropriation of $1,161,882, which is $218,729 below that for the past year. The largest item in the budget is $544,100 for teachers' salaries, while janitors' salaries run to $61,000, and those of principals and clerks to $59,800.

♦ Kenosha, Wis. The board of education has adopted a budget of $764,362 for the school year 1933, which is $186,023 below the budget for last year. The budget calls for $579,357 for salaries during the year, which is a substantial reduction below that for 1932, which was $757,662. The total expenditures call for a sum equivalent to 19.5 per cent below the 1932 actual expenditures. The largest part of the reduction was effected through a 15-per-cent reduction in the salaries of school employees.

♦ Superior, Wis. The school board has adopted a tax levy of $477,529 for 1933, which is a reduction of $109,072 from that of the past year. The budget estimate of the year totaled $668,621, as against $707,697 for last year. Of the total amount, $477,528 must be obtained from taxes. The major items in the reduction are $49,824 for teachers' salaries, $42,000 in salaries not payable until September, 1933, $10,000 in school maintenance, and $12,000 in instructional expenses.

♦ Seattle, Wash. The bond issue for the purpose of funding tax cancellations requested by the school board, at an election held on September 12, was carried by the voters with a large majority. The approval of the bond issue is considered a fine vote of confidence in the school board and the city schools. The bonds will be immediately offered for sale to the highest bidder.

♦ Chicago, Ill. The Steinmetz Senior High School, which lacked only two months of completion, stands idle at the present time because the board of education has no money to pay for the remaining carpenter work. The school which was started in September, 1930, has a pupil capacity of 2,830 and will cost $2,750,000 upon completion. The completion of this building would greatly relieve the congestion in the Schurz and Austin High Schools and would mean the elimination of portable buildings which have become necessary to handle the overflow of students.

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NEW SOURCES OF SCHOOL REVENUE AND TAX REDUCTION FOR REAL PROPERTY— THE INCOME TAX

(Concluded from Page 44)

Taxation for 1930 the yield of the business and professional levy at 1½ per cent was $5,316,630, the 3 per cent gain tax yielded $10,466,506 and the 6 per cent interest and dividend tax $15,964,478. Annuities yielded $38,397 and penalties $11,907 for a grand total of $31,797,920. Of this, $5,402,809 was distributed for "educational encouragement" on the basis of teacher's salaries and some other things, $24,000,000 was distributed to cities and towns on the basis of state valuation.

The New York Practice

New York state furnishes a good example of a state which, while not earmarking the income tax for schools, does devote a large amount of it to education through the medium of the state general-fund payments for state aid. The tax there applies to resident and nonresident persons with exemptions of $2,500, $4,000, and $400, respectively, for single persons, married couples, and dependents. These are rather higher than the usual amounts, in states with smaller numbers of wealthy people where the index of such matters naturally runs lower. The rates have been 1 per cent on the first $10,000 of taxable income, 2 per cent on the next $40,000 and 3 per cent on all in excess of $50,000. For the years 1932 and 1933, however, the rates are doubled as a temporary measure to meet conditions growing out of the depression.

The report of the New York State Tax Commissioner for 1930 shows a revenue of $80,271,316 from this personal income tax for that year. One half of this was distributed to subdivisions of the state on the basis of assessed valuations of real property, the other half became a part of the state fund. Since about one third of this fund was distributed for educational purposes it follows that approximately $14,000,000 of this money finally found its way into the treasuries of the public schools. The distribution of the half which goes out on the basis of real estate valuation does not bear as directly on public-school support, but it does aid in relief to real property taxation and so indirectly helps the school situation.

Several other states could be listed in this manner, but it is the purpose of this article to set up examples and typical cases rather than to provide any complete catalog of practices or conditions. Even a complete catalog of today would shortly be out of date, for the trend is in the direction of more state income taxes for schools. The coming legislative season will doubtless see more states move in this direction. Some may not be content to wait for a general session but decide to handle the matter in a special session. The Illinois action of a few months ago is an example. School people will, no doubt, be active in the promotion of such new legislation, and it appears that such action is within their proper sphere. It is important, however, that any new tax bills we advocate be well prepared and in accordance with the best practice in the field.

NEW BOOKS

Preparatory Book to Magic Hours

By Arthur I. Gates and Jean Y. Ayer. Paper, 72 pages, illustrated. Price, 24 cents. The Macmillan Company, New York City.

This book serves as a workbook to accompany the authors' *Magic Hours*, a silent reader for the third grade, and provides a series of speed and comprehension tests in silent reading.

The pupil is taught how to score his reading ability, to record the scores, and to plot his curve of progress in reading.

The exercises in the workbook are of the wo-d-study and comprehension types rather than the grammar type. The illustrations include several maps for which studies are provided.

The Johnson Speller

Book One. By J. F. Guy, R. G. Jones, and C. R. Wise. Cloth, 96 pages. Price, 40 cents. Published by The Johnson Publishing Co., Richmond, Va.

This book offers an easy introduction to spelling through picture, story, and the printed word. The work is intended for grades three, four, and five, and the lessons are arranged for weekly use in a school year of thirty-six weeks. The list of words has been carefully developed on the basis of the latest scientific studies and standard test findings, but the authors have gone afield to supplement the bare necessities of vocabulary with numerous words that are within the abilities of children and that represent home and play activities and interests. The lesson arrangement provides for continuous review of all new material two weeks after the original learning. Periodical reviews of "hard" words are called for. Pictures, games, and puzzles relieve the monotony of written and oral work.

Better Health for Little Americans

By Edith W. Lawson. Cloth, 160 pages, 55 illustrations. Price, 70 cents. Published by Beckley-Cardy Co., Chicago, Ill.

The idea of happiness as the outstanding result of health is emphasized in this reader for second grades. The stories, poems, and discussions on health all have true child interest, but they cover a rather systematic and complete consideration of health as a necessary equipment for life.

Insurance Practices and Experience in City School Districts. Prepared under the direction of H. C. Roberts, chairman of insurance committee. Paper, 224 pages. Bulletin No. 2, 1932, of the National Association of Public-School Business Officials. The report has been prepared in response to a demand for information on problems and costs incident to protection against loss by fire. The study involved a survey of school districts by states, covering the experience of the past ten years in fire insurance; a survey of self-insurance by states in which insurance on school buildings is included; a survey of self-insurance as practiced by a number of city school districts; and a survey of the practice, experience, and statute limitations governing other forms of insurance. The material is directed principally to school officials whose dealings with insurance matters have been limited, whose knowledge of the subject is elementary, and whose work and other duties are such as to make an extended study impossible and impractical. One chapter of the study is devoted to a study of property appraisals for insurance purposes and of the methods employed for carrying building values both as capital assets and for insurance purposes.

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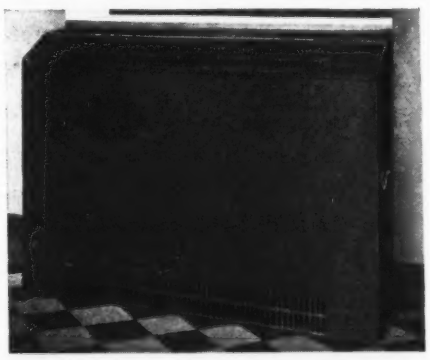

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What Can They Sell?

(Concluded from Page 20)

time he's through high school he should have shown some indication. But suppose he's one of the few who haven't done so; that's no reason why he should think he must be a teacher. Rather, it emphasizes the need to lay a general foundation in the freshman year, and then see what has appealed to him as the branch he wants to stress later. That's where the faculty people could help, if they only would forget their specialties and analyze each student a bit."

"But there's one thing I think should be done," he added. "Parents should insist that each freshman take at least one subject that can be applied in two or more ways. No one can tell what the future will hold for any one of them. They may hate teaching, or may be short in discipline, or in judgment, or in any of a dozen things quite apart from classroom grades. If, for instance, a girl has stressed French and history, what can she do with her training? Teach, and nothing else. But if also she has taken home economics, or commercial work, or certain forms of science or music or even art, she can twist these around a bit and find some way to sell them in a commercial market. For the men, there's manual training, commercial work, agriculture, other sciences, which can be used to attach them to pay checks, even if small ones. I'd insist that at least a minor should be selected from these two-application subjects."

"Now I think of it, we have a case of that kind at home," said Mr. Brown. "The daughter of a low-salaried professional man. The girl loves music and I believe has real talent there; of course, she wants to take music mainly; but her parents insist that she must take a commercial course first, with music as a secondary objective until her commercial work is finished. A more unhappy girl one couldn't imagine. She's a friend of my daughter, and the two were fussing about this matter at the house recently. Finally I said something like this: 'When you think of a job as a stenographer, where do you mentally see yourself?' She stared a minute, then said, 'Why in some office, I suppose.' 'Yes, but what kind of office?' 'Oh, a department store or an insurance office, or maybe a law office.' I said this: 'Now see here, Annabel. Use your bump of logic. What store manager or insurance manager would hire a grouchy stenographer who hated her job and looked liked a thundercloud all day long? But there are music offices, too; music publishing houses, music stores, studios, and schools of music that employ stenographers, and they prefer those who know what they're writing about. Why shouldn't you find that kind of a job, where you'd be really interested?' "

" 'I never thought of that,' she admitted. 'This gives the whole thing a different slant. Thank you, Mr. Brown.' Then it seemed a good time to state an unpleasant fact to my daughter, so I continued: 'Here's Kathryn, thinking only about art and dramatics. She doesn't know it yet, but she's going to take a business course, too. Just as a safeguard, you know; then if need be, she can get her job in some art gallery, or art store, or some school of dramatics, or in a theater director's office. Take her cousin Margaret, with a master's degree in English. She's frantic because she can't find a teaching job. Suppose she had stenography also: can't you see her in a publishing house, or any of half a dozen places where her English training would aid her every day? No more than playing safe, I'd say, to take one thing you can sell together with the thing you want.' "

"The same condition exists with nurses' training," Mr. White added. "Again the rush into training schools about war time. Today I know positively of graduate nurses who are doing housework, while others are working in hospitals for board and room and very little more. What alternative can you see for these?"

"Oh, a very popular one," said Mr. Brown. "Nurses make the finest wives young chaps could select; And it seems to me that more nurses than teachers marry young. But if this were broadcast, the training schools would be crowded more than ever! Anyway, let's steer these youngsters into safe courses — let them take their choice in majors, but they should take one other thing that they always can sell. Glad to see you, White. Let's get together next time you're in town."

CHILDREN'S BOOK WEEK, NOVEMBER 13 TO 19
Books for Young America are more important in 1932-33 than ever before, whether in school or home.

Financing the Public School

(Continued from Page 22)

long run to secure for it less adequate financial support than may accrue by graciously accepting immediate reductions.

In the second place, it is nothing short of fatuous to insist that taking the educational program or the country as a whole, financial economies should not be permitted, or cannot be, without impairment to educational service. In saying this I know the abject penury of programs, buildings, and equipment that exist in some quarters. Here, *more,* not *less,* money should be spent. On the other hand, I could now name some city school systems that would save thousands of dollars by following simple, universally recognized, sound principles of organization. But tradition and vested interests stand in the way. Our unnecessary duplication of administrative units is expensive, and we know it, but we still are slow to pursue the educationally wise as well as the financially economical course. In methods of instruction there are some places where we could teach more efficiently and spend less money.

The expansion of our secondary curriculum has gone to limits that are highly expensive, though to a considerable extent still largely experimental. Our elementary-school curriculum gives symptoms of a similar affliction. Why not a cessation of this type of experimentation for a time, give a thorough reëxamination of those curricula in terms of specific objectives, and secure the benefits of resulting economies?

Improvement in the Tax System

In the third place, we must recognize the weakness of our whole system of taxation and the inevitable insecurity of support for those public institutions dependent upon it. I have seen no data that give any indication as to how much our taxable wealth has shrunk since October, 1930. It is said, however, that taxes now levied annually represent as much as 25 per cent of this wealth. If the statement is anywhere nearly true it indicates a situation which cannot continue. It may be true "(1) that our tobacco, cigaret, and cigar bills are twice that of the total cost of public education; (2) that for the amount we spend for candy and ice cream we could more than pay for all the bills for the conduct of our schools; and (3) that the amount paid out for perfumery and cosmetics alone would pay at least one half of the debt."[15] Let us remember that the level of civilization which creates these demands and makes the expenditure possible, is to a considerable extent the *result* of our educational program. At the present time the recital of these facts or their existence offers no relief to our dilemma.

If the school people of this country were wise they would take a lesson from "the mammon of unrighteousness," and do all in their organized power to get the tax system of our states and smaller governmental units on a sounder economic basis. They would also use the present emergency as a tremendous lever toward this end. For years, leading economists have pointed out the unsoundness of the general property tax. Now, when the schools' support is in jeopardy our great hue and cry is about the *amount* involved. What we should be concerned about also are proper methods of tax assessment and tax levy. Had we done our task well in this matter while the public's wealth was available, we should not have found ourselves in our present predicament.

Changes in School Program

In the fifth place, we might to a degree at least, and in certain centers, materially curtail for a limited time building programs already projected. This should be done only where the educational interests of the children will not thereby be appreciably interfered with. But let us be sure that any decision made on this point shall be reached only after most careful scrutiny, including thorough inquiry again into the original conditions and reasons which first caused these programs to be rejected.

In closing, may I pass on to you the exhortations of a great American educational leader. "We are faced with as great an issue and as genuine an opportunity as any group of schoolmasters ever faced." "The philosophy to which we have held with commendable tenacity since pioneer days is that the whole life of the nation turns upon the education of the children, and the facts of the past have abundantly justified this philosophy. But this does not mean that our schools are perfect and that no changes of purpose, outlook, or program can be made in them."

"A wise people who have regard for their own interests and who cherish what they owe their

(Concluded on Page 76)

[15]Weber, Oscar F., *Problems in Public School Administration,* p. 414.

PERFECT BALANCE OF STRENGTH AND POWER

THE MACK SCHOOL BUS CHASSIS

Balance, coordination—call it what you will—is not always apparent on the surface. The most beautifully muscled athlete is not always the champion; race horses may look like winners yet prove to be "also rans." And in buses, too, outward appearances are deceiving.

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WILL SOLVE YOUR FLOOR PROBLEMS

(Concluded from Page 74)

children will, through all in spite of the minds of frenzied finance, keep constantly at a high level the intellectual and spiritual resources of their life and power. . . . Whatever we find it necessary to do throughout the nation, in the various commonwealths, or in our respective communities in the preparation of public budgets, careful and thoughtful consideration should be given to the needs of democracy, of equality, and excellence, as well as of economy. Those who represent the schools, on the other hand, should with equal reasonableness, limit expenditures to the paramount needs of the intellectual growth of the youth of the land and to the social and scientific requirements of the nation, making such changes in administration policies as will, if possible, increase the effectiveness of the schools without loss of opportunity to you and without lowering the standards and outlook of the teaching personnel."

SOME ADVANTAGES AND DISADVANTAGES OF THE SIX-YEAR HIGH SCHOOL

(Concluded from Page 26)

school unit, and although this change may come during early adolescence, it comes no earlier and no later than the first change of unit in the 6-2-4 and the 6-3-3 types of organization. After a pupil has entered the six-year high school he remains normally for six years and is not embarrassed by further changes of school unit until he has completed his high-school work and probably all or most of the adolescent stage.

It is better fitted to meet the needs of over-age pupils and those who must leave school before graduation. Over-age pupils should be permitted considerable freedom in their choice of courses in high school. Such pupils tend to drop out of school in great numbers. Some of the over-age pupils have learned from experience what work they are best fitted for. They have decided on the preparation that is most worth while to them. If they are required to pursue a stereotyped sequence of courses, many become discouraged and soon leave school. Since the six-year high school offers work on various levels, it is peculiarly fitted to meet the needs of over-age pupils.

Due to economic reasons, some pupils are certain that they must leave high school before their graduation. To hold them strictly to regulations concerning prerequisites and course sequences will in many ways defeat the real function of the public-school system. Democracy demands that the public-school system assist *each* child to make the most of himself in order that he may better serve himself and society. Pupils who must leave high school early should, therefore, be permitted much freedom in choosing courses which have explicit values.

After the first six-year high school in Cleveland had been in operation for 13 years, 28 representative teachers out of the 155 employed in that school were asked to state somewhat fully what they considered the advantages and disadvantages of this type of high school. These 28 teachers listed 35 purported advantages and 33 purported disadvantages. Most of the important advantages they have listed have already been discussed. It is difficult to see why some of the points listed by the teachers should be made either for or against the six-year scheme as such.[12]

[12]Whitney, Frank P., "The Six-year High School in Cleveland," *School Review*, 37:267–71, April, 1929.

(*To be concluded*)

A COLONIAL-STYLE SCHOOL-HOUSE

(Concluded from Page 39)

and Bedford stone. The interior bearing walls are of brick, and the floors are of reinforced concrete. Steel has been used for the long spans of the gymnasium ceiling. The interior of the building has been finished in conservative school style. The stairs are of terrazzo, the corridors have linoleum inserts in the walkway and terrazzo borders and base. The classrooms are finished with vertical-grain white-oak floors. Metal door frames have been used, and wood trim has been omitted where possible. The auditorium-gymnasium has a maple floor, enamel brick wainscoting, brick walls, and an acoustical plaster ceiling. The toilet rooms have terrazzo floors and base, and hard plaster walls.

The basement of the building, which is rather high, has been so arranged that at either end of the building a classroom with full length windows is used for manual-training and household-arts purposes, respectively.

On the first floor there are six standard classrooms, two restrooms, and boys' and girls' showers. The gymnasium-auditorium is entered from this floor.

On the second floor there are seven standard classrooms, a library, toilet rooms, a medical inspection room, and an office for the principal.

The gymnasium has been arranged for use as an auditorium. It measures 56 by 41 ft. and is fitted with 300 movable chairs for which a special chair-storage room has been provided.

The building is heated by means of hot-air furnaces and is equipped with temperature regulations. The plumbing and sanitary equipment is of the heavy-duty school type, and the electrical system includes clocks and complete lighting for all of the classrooms.

On the basis of a normal capacity of 560, the building cost $327 per pupil complete. Including the architects' fees, the total cost was $183,000. The furniture, etc., cost $5,000 making the total cost $188,000. On the basis of the total cubic content the cost was 30 cents per cubic foot complete.

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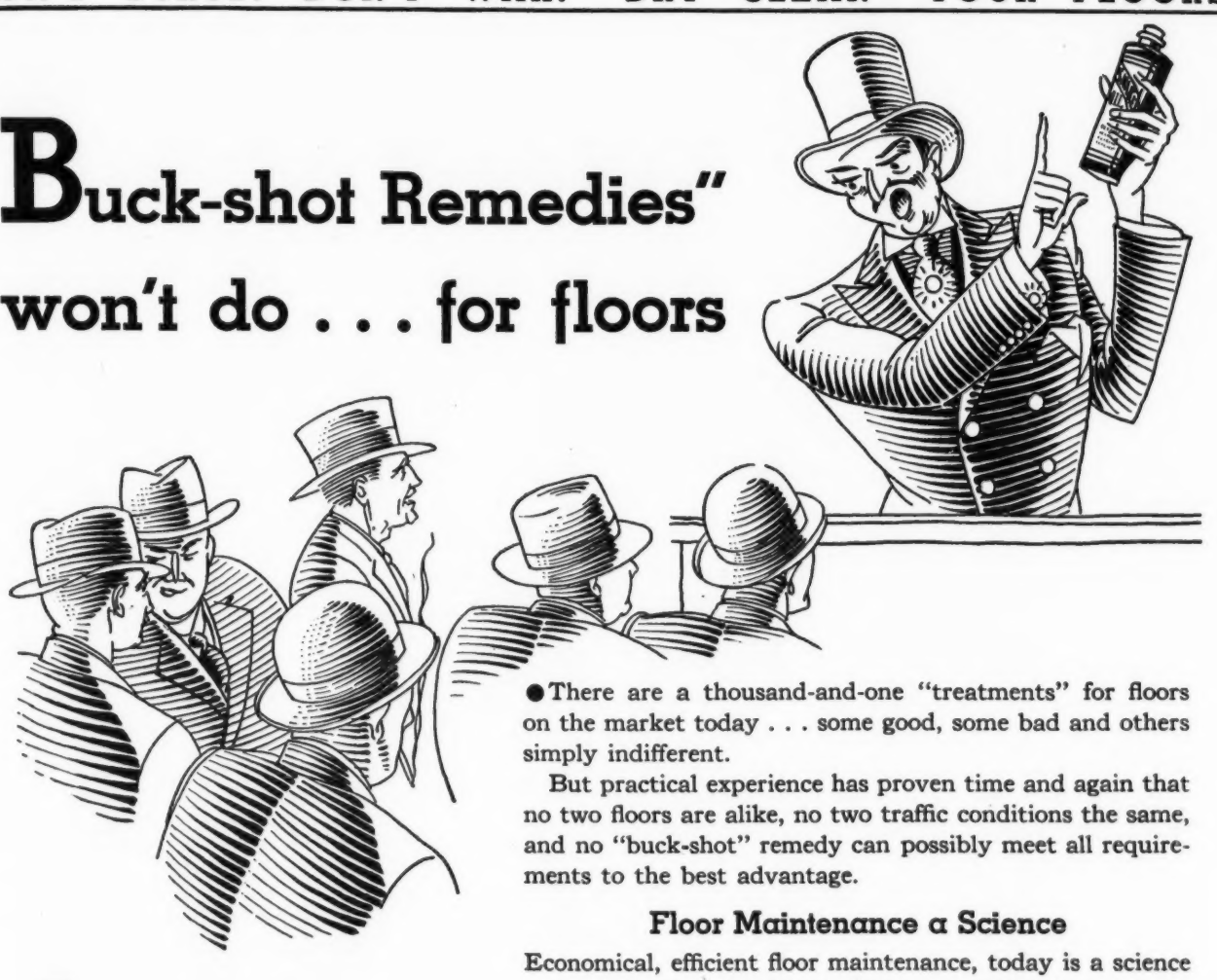

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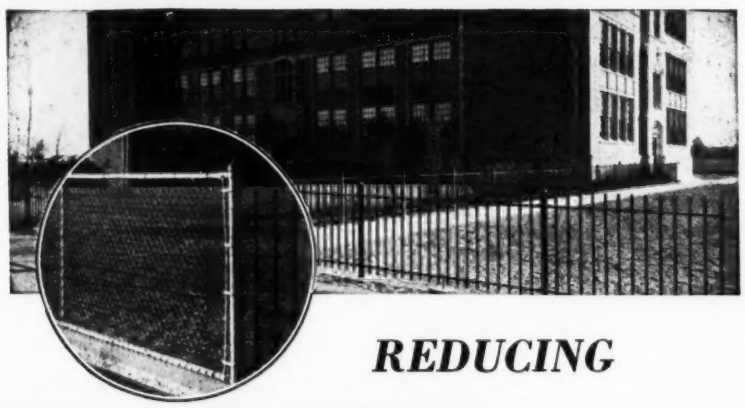

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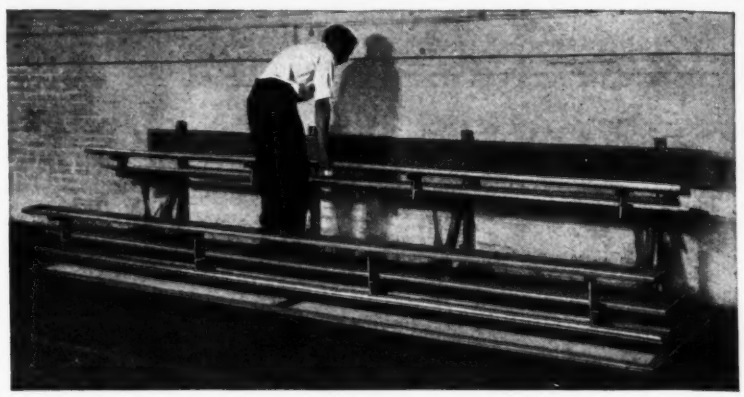

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RELATIVE SALARIES FOR DIFFERENT POSITIONS

(Concluded from Page 30)

to 100,000 population; and that in the third column from 449 cities of 10,000 to 30,000 population.

The information given in Table III is repeated on a relative or index-number basis in Table IV, the salaries of elementary teachers again being taken in each case as 100.

The information tabulated in Table IV is illustrated graphically in Figure 2. Since it would make the graph too confusing to add all the nine types of supervisors, only the median for the nine is illustrated. There are striking differences between the cities of the three groups in regard to the relative salaries of the superintendent, assistant superintendent, and the staff of nurses. There are moderate variations in the case of the business manager, supervisors, and janitors. In all other types of positions, involving perhaps 90 per cent or more of the staff, there is surprising uniformity in the relative salary paid when measured in terms of the salary of the elementary teacher. The relative salary of the junior-high-school teacher is very close to 113 and that of the senior-high-school teacher approximates 130. The junior-high-school principal may expect to receive a little more than twice the salary of the elementary teacher, while the principal of the senior high school receives about two and one-half times the salary of the elementary teacher. The superintendent of schools receives over three and one-half times as much as the elementary teacher in the smaller cities, over four times as much in the medium-sized cities, and almost five times as much in the largest cities. The head janitor receives one and one-third times as much as the elementary teacher, the other janitors average about nine tenths as much as the classroom teacher. The clerks in administrative offices receive three fourths as much as the teacher, while the clerks in the offices of the principals receive two thirds as much.

These general relationships, remaining rather stable for so many types of positions in cities of such varying size, may be well taken as representing the best composite judgment of school boards and administrators all over the country as to the relative remuneration which should be paid for different types of service in the school system. Such relationships may well receive careful consideration in the present period of critical examination and widespread readjustment of salary schedules. In many places it may well be that some classes of teachers or administrators are decidedly overpaid or underpaid in comparison with others. The summarized practice of the country is one good means of determining whether or not this is the case.

THE UTILIZATION OF ELEMENTARY-SCHOOL BUILDINGS

(Concluded from Page 32)

rooms, toilets, teachers' restrooms, and the heating and ventilating plant.

An attempt to measure objectively the use made of such space is extremely difficult and of questionable value. An office is, for example, an essential, but measurement of its use presents a different problem than that of a classroom. To employ room utilization as a unit of measure is hardly adequate since, by definition, this measure is only concerned with whether or not a room is in actual pupil use at a given time. The definition may, of course, be altered to mean actual use for the intended purpose. Since offices are intended to be occupied most continuously by administrative officers, it might be plausible to use such a unit. Who, however, is to say what a desirable standard may be? Is that principal's office most efficiently utilized by the man who spends his whole day there, or by the man who devotes two thirds of his time to classroom supervision and is thus at his desk only one third of the day? Is an outer office and waiting room any less necessary because the building is too small to warrant a full-time clerk to occupy it, or because parents or pupils are not constantly crowding its facilities?

Again, how shall we obtain a measure of use of janitor-engineer quarters? We do not expect the janitor to stay in the boiler room all day. These quarters may be most efficiently operated by the man who finds it unnecessary to remain in them for any length of time.

What about corridors, stairways, storerooms, or toilets? These facilities are essential but hardly to be judged by the same standards as any of the above.

In this study certain of these service rooms were subjected to measurement. Others were not. Utilization of teacher and pupil lunchrooms, administrative suite, hygiene suite, and locker-shower rooms was calculated on the basis of occupancy by pupils or staff members as the case might be. Offices were found to be in occupancy by clerk or principal practically 100 per cent of the time. Hygiene suites were used only 31 per cent of the time. Lunchrooms were idle except for the noon hours while locker-shower quarters were not used for their intended purpose during the school day.

The materials here presented are offered not so much with the idea of describing a technique as of putting on record data for comparative purposes. These data seem to the writer to point out the desirability, even the necessity in some instances, of evaluating our plant requirements. Facilities in school buildings are provided to serve certain purposes. Where these ends are not served we need to ask why, in order that costly space shall not be wasted.

HOW TANGIPAHOA PARISH MAKES GOOD CITIZENS OF ITS FOREIGN-BORN CHILDREN

(Concluded from Page 42)

children assist their parents in the field, and many of the older ones obtain positions in the shipping associations. Through this arrangement, many are able to complete the high-school course.

This year, 35 of the graduates of last June left to attend higher institutions. Of this number, 30 are children of foreign-born parents.

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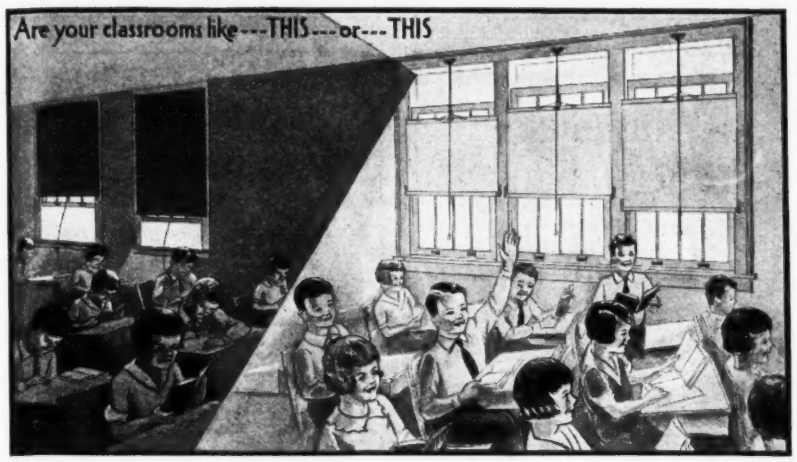

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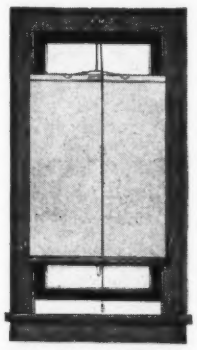

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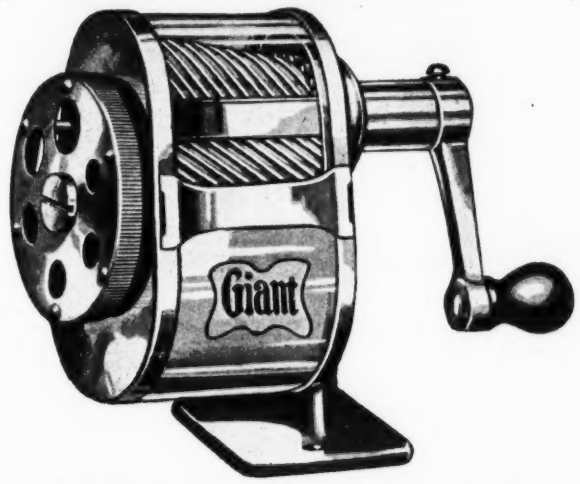

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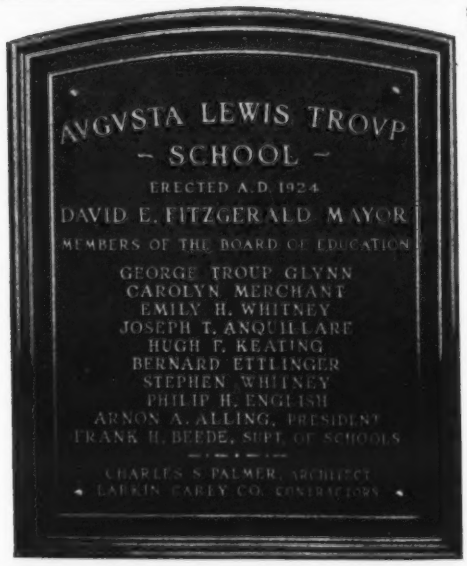

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Over 3,170 now in use . . many with service records . . no death or injury reported. Approved by the Underwriters' Laboratories.
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Prices are the lowest we have known in our 20 years' experience serving colleges, schools and fraternities. Small engraved diplomas, $9.50 per 100. Write immediately for information and samples.
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Easily painted with the aid of Letter Patterns. Simply trace the pattern and fill in. Made in a large variety of style and sizes. Write for free samples.
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Salesmen wanted for profitable sideline—To call on schools and colleges, willing to sell an additional line consisting of academic caps, gowns, hoods, gymnasium outfits, hockey outfits, school uniforms. State territory and qualifications. Excellent opportunity to connect with old established firm. Address **American School Board Journal, Dept. 48-J, Milwaukee, Wis.**

Teacher Agencies

Fisk TEACHERS AGENCY CHICAGO
OUR SERVICE IS NATIONWIDE
Experienced placement authorities in charge of every phase of educational activity. Our work includes positions from college executives to primary and kindergarten teachers. Excellent librarians, secretaries, teachers of physical education and home economics are on our lists. Write for information.
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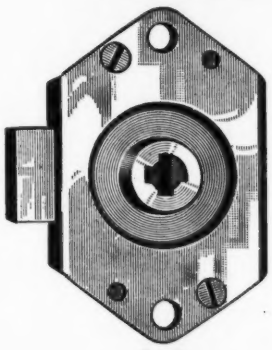
The Dudley

DUALOCK



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First of a series of *safer* key locks constructed on an *ADVANCED* pin tumbler principle. Non-Pickable. Key and Masterkey of exclusive design registered to each installation, minimizing danger of unauthorized issuance of keys and duplicates.

Write for Complete Information and free demonstration of the new principle.

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WORLD'S LARGEST MAKER OF COMBINATION LOCKS

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Send for circulars & prices.

No. 430

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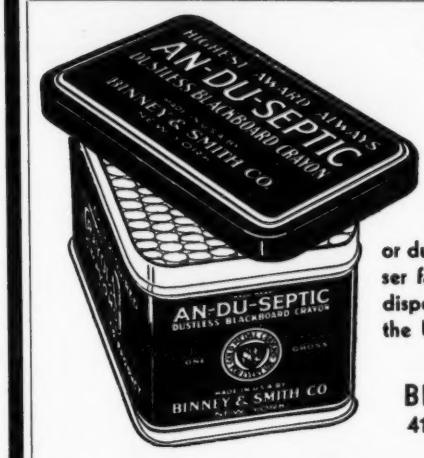

AN-DU-SEPTIC DUSTLESS CRAYON

Makes a smooth, legible mark with no ragged edges. Erases easily, does not leave a greasy or dusty surface, the dust from the eraser falling to the chalk trough and not dispersing in the air. Will not scratch the board. Packed in moisture proof metal containers.

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A GOLD MEDAL PRODUCT

SLATEX—A Chemical Blackboard Finish

Renews and Preserves the Writing Surface of Blackboards

Here's a *new* preparation for renewing grey, faded blackboards. Slatex penetrates and sterilizes, giving the board a perfect finish without building up an artificial surface.

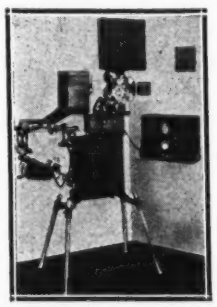
Slatex makes blackboards easy to write on—easy to read from. The work of your teachers becomes more effective. Students take a keener interest in blackboard work when they can read without squinting or eye strain.

In comparison with results, the low cost and ease of application make this process a practical one. It takes but one 8-ounce can and a half hour to SLATEX 200 square feet of blackboard.

Single can (8 oz.).....$1.50 — Case (12 cans).....$12.50

CARBON SOLVENTS LABORATORIES, 1704 Lefcourt Building NEWARK, N. J.

SPECIAL MOTION PICTURE EQUIPMENT FOR SCHOOLS



Mellaphone treats every School as a separate problem and due to our knowledge gained by experience, we are able to furnish the best Motion Picture Equipment at the most economical prices.

Let us help you select the correct Equipment for your School. Whether it is a Portable Set or Standard Equipment, Mellaphone can supply your needs in all Sound Equipment.

Write us for full information regarding all Motion Picture Equipment for Schools

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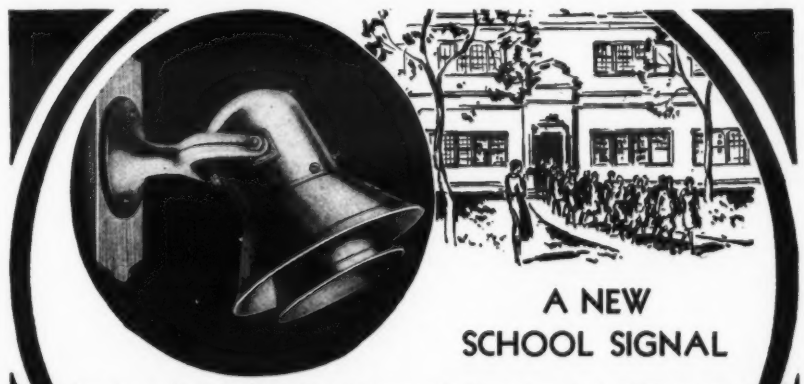

A NEW SCHOOL SIGNAL

Here is a starting and quitting signal that serves a double purpose. Its siren-like tone carries much farther than ordinary whistles, gongs and bells. Hence, it can be used also as a fire signal. Inexpensive, weather proof and easy to install. Will work with an existing bell system. Write for Bulletin No. 38.

FEDERAL ELECTRIC COMPANY
8714 So. State St., Chicago, Ill.

BETTER EQUIPMENT *for your* STAGE

Distinctive Quality and Service at a Reasonable Cost.

Write

Twin-City Scenic Co.
2819 Nicollet Ave. Minneapolis, Minn.
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CORRY BLEACHER CO.

CORRY, PA.

Manufacturers Of

PERMANENT AND PORTABLE STEEL OR WOOD BLEACHERS

Safe and Economical -:- New or Second Hand

After the Meeting

A "SILK PURSE" TO MAKE

I used to "mark off" on Lizzie's themes
For "I seen's," "has went's," "ain't's"
And other insufferables.
But today, while in a corner drug store,
I saw for the first time her tinsely mother
As she shrilled to her offspring counterpart:
"That there rouge are too high a price fer us, Lizzie!" —
So now my goal in English I with Lizzie shall be?
— I give it up!

John B. Herring

PROSE AND POETRY

Before a class of ambitious hopefuls stood the teacher, attempting to elucidate the mysteries of prose and poetry.

"If you were to say," explained the teacher, 'There was an old woman who lived behind a hill, and if she hasn't moved she lives there *still,*' that is poetry. But if you were to say, 'There was an old woman who lived behind a hill, and if she hasn't moved she lives there *yet,*' that is prose. Now, class, give some examples of prose and poetry."

After a minute, a bright-eyed and impatient youngster in the back row jumped to his feet.

"All right, Tommy, give me an example."

Tommy scrutinized his paper sharply, and read: " 'There was an old woman who lived by a well; one day she stepped in and now she's in ——' say teacher, what do you want, prose or poetry?" —

LOGIC

Policeman [to schoolboy]: Who owns this cow and calf?

Schoolboy: I don't know who owns the cow, but I have an idea who own the calf.

Policeman: Well, who owns the calf?

Schoolboy: The cow. — Irish Times.

VERY NECESSARY

Supt. A. C. Weglein, of Baltimore, characterized the financial problem of some boards of education by telling this story.

At a colored church vestry meeting the preacher said: "Bredren, we must do something to remedy de *status quo.*"

"Brudder Smith," asked a vestryman, "What am de *status quo?*"

"Dat, my brudder," said the preacher, "am de Latin foh de mess we's in."

Disgraced

"How are your children getting along?"

"Oh, fine. Tony wants to be a racketeer and Molly wants to be a chorus girl."

"But what happened to Al?"

"Oh, we had to disown him. He wanted to go to college." — University of Southern California Wampus.

The Reason

Supt. Paul Stetson, of Indianapolis, describes the plight of some school boards as similar to that of a commercial traveler who was seen eating a very scanty meal.

"What's the matter, old man," he was asked. "Are you on a diet?"

The traveler shook his head. "Nope," he said, "on commission."

A PROBLEM FROM PRESENT-DAY LIFE—*Detroit News.*

Buyers' News

Death of Mr. Lomb. Mr. Adolph Lomb, vice-president of the Bausch & Lomb Optical Company, died at his home in Pittsford, N. Y., on September 30, after a brief illness.

Mr. Lomb, who was 66 years of age, had been connected with the Bausch & Lomb Optical Company for 53 years, having entered the company as a young lad at the age of 14.

Besides being an executive of the company, Mr. Lomb was identified with a number of scientific and patriotic societies, chief among which was the optical Society of America. He took great interest in civic affairs, particularly among the German-Americans of Rochester.

Mr. Lomb was a graduate of the University of Rochester and had also done research work at the Massachusetts Institute of Technology and the University of Berlin.

Announce Holmes Appraisal Service for Schools. The Warren S. Holmes Company, of Lansing, Mich., and Chicago, has announced the opening of an appraisal service, which is intended to render assistance to public schools.

The Holmes Company has been successful in its new venture and has been able to conduct a number of appraisals for public schools in the State of Michigan.

School authorities who are in need of such special service will receive prompt and careful attention at the hands of the Warren S. Holmes Company.

TRADE PUBLICATIONS

New Westinghouse Lighting Catalog. The Westinghouse Electric Light & Manufacturing Company, of Cleveland, Ohio, has just issued its new Catalog No. 219-B for 1932, describing and illustrating its complete line of electric lighting equipment for schools and other public buildings.

The catalog lists sollux corridor luminaires, lunalux, sollaire, and sollite lighting, as well as window floodlights and accessories for lighting. The lights are inclosed in globes of opal glass for both direct and indirect lighting and are practically dustproof. The frequency of cleaning is thus lessened and the efficiency of the lighting is maintained at the desired degrees. Westinghouse lighting units provide simplicity, accessibility, and efficiency.

A copy of the catalog will be sent to any school official who is interested in good artificial lighting for schools.

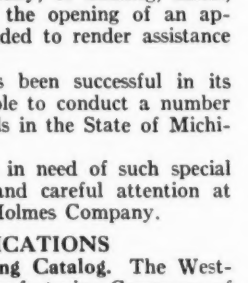
TRADE PRODUCTS

Announce New Treatment for Schoolroom Floors. The Continental Car-Na-Var Corporation, Brazil, Indiana, has announced the marketing of a new floor product for renovating schoolroom floors. Formerly, schoolroom floors were treated with oil. Alkaline scrubbing removed only the oil near the surface and caused the imbedded oil to rise to the top, resulting in spots and preventing the effective use of any floor-treating method.

The new product, called "Absorb-X," is a finely granulated material, which is applied to the floor after the surface oil has been removed with an alkaline cleaner in the usual way. It is saturated with water and allowed to stand on the floor until dry, with the result that it draws the imbedded oil out of the floor and absorbs it. The main advantage of the treatment is that in cleaning the floor, the oil comes off, and after rinsing and drying, it is then ready for the finishing treatment.

New Dudley Master-Keyed Combination Lock. The Dudley Lock Corporation, 26 North Franklin St., Chicago, Illinois, has just announced its new "Dualguard" lock, its latest design in a master-keyed combination lock, which defies picking and locks without reducing the inherent safety of the combination lock.

The "Dualguard" employs the new "Dualock" principle, which is an advanced pin-tumbler design, positively pickproof, and capable of registering to its installation. The key may only be made by Dudley on special machinery, so that a duplicate masterkey can only be obtained by proper authority.



NEW DUDLEY MASTER-KEYED COMBINATION LOCK

Another feature of the "Dualguard" is the reset key, which enables a supervisor to completely change a combination on assignment of lockers. This may be done quickly, without removing any part of the lock on the door. Students enjoy all the advantages of the combination lock, with freedom from the bother of carrying and remembering keys and with the assurance of exceptional security.

Complete information and prices may be obtained by any school official upon request.

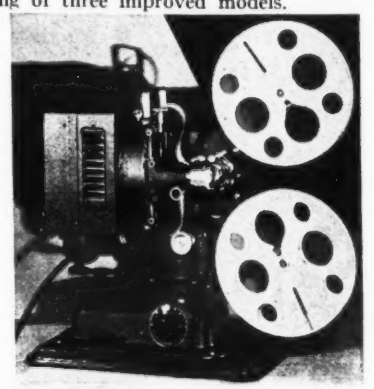
New RCA Victor Centralized Radio Panel. The RCA Victor Company, Inc., of Camden, N. J., has announced a new centralized radio panel, which has been designed to operate a number of loud-speakers located in large buildings.

NEW RCA VICTOR CENTRALIZED RADIO PANEL

The new panel is especially suitable for schools which offer auditorium and classroom programs. Convenient controls are provided for transferring from radio programs to phonograph or microphone units. Neat, compact construction, high-quality reproduction, and ease of operation are the chief advantages of this new device.

Complete information may be obtained by writing to the firm at Camden, N. J.

New Victor Model 10 Silent Projectors. The Victor Animatograph Company, Davenport, Iowa, has announced a revolutionary line of silent projectors, consisting of three improved models.



NEW VICTOR No. 10 SILENT PROJECTOR FOR SCHOOLS

The new Model 10 is supplied with a 400 watt, 110-, 115-, or 120-volt lamp and contains the exclusive Victor features, such as 4-point film protection with automatic film trip, adjustable shuttle, and built-in automatic 3-way rewind. It contains such new features as a cool-running, constant-speed motor, and a finish of satin brown.

The Premier Hi-Power Model 10-FH is another new model, containing 400 watt, 110-volt biplane filament lamp, and an optical system twice as efficient as the regular direct optical system regularly supplied.

The Victor Universal Hi-Power Model 10-RH, which is identical to the Premier Hi-Power except for lamp resistance, is of the variable rheostat type, and is equipped with separate motor for forced cooling and also ammeter and variable resistance control.

These new models contain all the equipment for adequate intensity and maximum illumination, and may be obtained at a very low cost.

Complete information may be obtained by any school official, or instructor, upon request.

Midland Supplies for School Housekeeping. The Midland Chemical Laboratories, Inc., of Dubuque, Iowa, have recently issued a new technical bulletin, illustrating and describing its complete line of chemical products for school cleanliness and sanitation.

This latest booklet of the firm describes its line of floor-maintenance products, liquid soaps, general school-cleaning products, disinfectants and deodorants, dry-cleaning products, floor-scrubbing and polishing machines, soap dispensers, and accessories.

The Midland system has been perfected after years of practical experience in the field of janitor training and school-building maintenance, and its products are the result of experiments, tests, and research in an effort to arrive at a standardized method of school maintenance.

» » » *A unique and valuable contribution to the literature of modern school architecture* » » »

A Method of Procedure and Checking Schedule for Planning School Buildings and their Equipment

By John J. Donovan

Here is a checking schedule for elementary, junior, and senior high school buildings, so arranged that it is practically impossible for a school superintendent or a school architect to omit any detail of a school building. It is a book of more than 350 ruled pages, listing every possible item to be considered in the erection of school buildings. It includes an outline for various types of school organization, academic and industrial-arts classrooms, kindergartens, special rooms of all types, laboratories, gymnasiums, corridors, libraries, cafeterias, auditoriums, etc. Only an examination of the book can demonstrate the service it offers any one interested in the construction of schools.

Price, $6.50

The Bruce Publishing Co.
Milwaukee
New York Chicago

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That "*slip*" . . . *it tells how this*

New Flat Wall Finish saves you money!

YOUR PAINTER draws his brush across the wall. But how does it move? Quickly, or slowly? With a fine, free sweep or a heavy drag? The answer has a vital bearing on *your* painting costs.

Impartial tests prove that the new Barreled Sunlight Flat Wall Finish slips off the brush far more easily than any other flat paint of comparable quality. Its amazing "slip," or ease of flow, insures economies heretofore impossible.

This "slip" speeds up your painters without hurrying them . . . materially reduces time and labor costs . . . your greatest painting expense.

And there is less paint to buy when you use Barreled Sunlight Flat Wall Finish. Its paint-saving spreading power has been proved to be *from 16% to 50% greater than that of other high-quality flat paints.* This without loss of effective coverage!

When the job is done, savings continue. Barreled Sunlight Flat Wall Finish dries smooth . . . tight. It is dirt- and dust-resistant . . . easy to wash. Extremely durable, it may be washed repeatedly without harm to its handsome surface, thus saving expensive repainting costs.

Those who paint your building interiors will tell you there's nothing like Barreled Sunlight Flat Wall Finish for easy working qualities . . . tremendous spreading power. Your repainting cost sheets will prove its decided economy.

Investigate this sensational new flat today. Write for further details and free sample can to U. S. Gutta Percha Paint Co., 44-K Dudley Street, Providence, R. I. Branches or distributors in all principal cities. (For Pacific Coast, W. P. Fuller & Co.)

Made in White . . .

Easy to Tint

An all-oil product, the new Barreled Sunlight Flat Wall Finish may be tinted any harmonious shade with pure colors-in-oil. Comes in cans, five-gallon buckets and large drums. Quantities of 5 gallons or over tinted to order at the factory without extra charge.

THE NEW Barreled Sunlight FLAT WALL FINISH

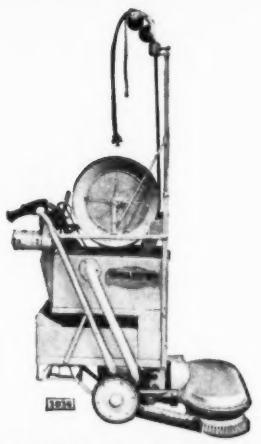
REG. U. S. PAT. OFF.

In the most important problem of Janitorial Service...

(See American School Board Journal, October, Page 41)

Do You Scrub or Dry Scrub?

FOR the sake of efficiency and economy, let us show what you can do with a *Finnell* Electric Scrubber...the hours of labor you can save...the cleaner, brighter floors you will have. *Finnell* makes the only complete line of scrubbers...nine of them...a right size for every floor type and area. A full line of soaps and powders, also. *Finola*, for those who prefer a scouring powder; *Solar-Brite* for those who wish a liquid scrub soap.



One of complete line of *Finnell* Scrubber-Polishers. Gets floors incomparably cleaner than hand scrubbing in a fraction of the time.

Do You Wax?

THEN you should learn about *Finnell-Kote* the wax that "sets" in 10 seconds. No need to wait for an hour to buff this wax. *Finnell-Kote* is applied hot. The melted *Finnell-Kote* flows to the floor, is instantly and evenly distributed and brought to a lustrous polish in one operation. Takes less time, goes further, lasts longer. *Finnell* line includes also liquid wax, water wax...all of finest materials...and low in cost. Any *Finnell* Scrubber is also a polisher. Will improve results of any wax. Rubs the wax in, polishing off the surplus and leaving surface safe as well as beautiful.

Close-up of melted *Finnell-Kote* flowing to floor from dispenser, to be quickly distributed by the brushes and a second later polished.

Do You Mop?

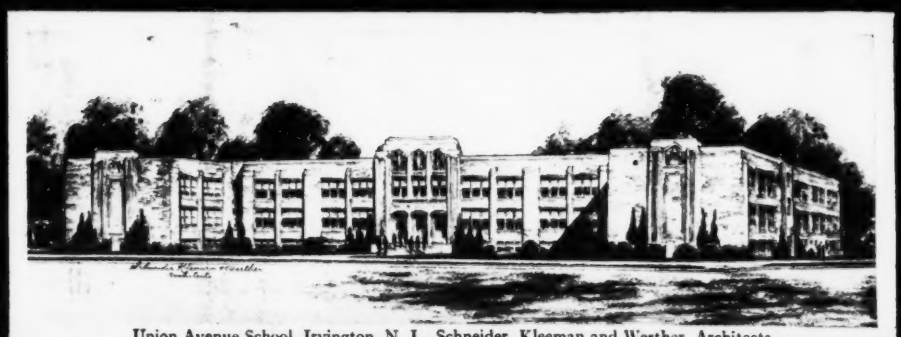
IF you have any need for mopping, a *Finnell* Mop Truck is indispensable. Carries compartments for clean water and dirty water. Keeps your mop clean. Uses clean water for every square foot of floor.

Finnell Mop Truck. Available in several sizes...50 gallon, 25 gallon and 15 gallon capacity. Timken roller bearing, rubber tired wheels.

Whatever You Need

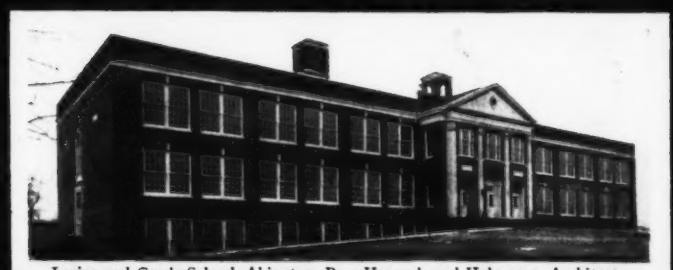
HOW to seal new floors?...What is proper preservative?...How often to scrub or wax?...What kind of filler to use?...These are some of the many questions that arise in the treatment and care of floors. Feel free to call upon any *Finnell* representative for advice. If he cannot tell you immediately what you wish to know, he can obtain the information in short time from the immense data we have on file. For this service...for a survey of your floors...for a demonstration of any *Finnell* product, any *Finnell* machine, address FINNELL SYSTEM, INC., 811 East Street, Elkhart, Indiana.

Prominent Schools Equipped with AUSTRAL WINDOWS and AUSTRAL WARDROBES.



Union Avenue School, Irvington, N. J., Schneider, Kleeman and Werther, Architects.

Hawthorne Public School, Hawthorne, N. J.,
Fanning and Shaw, Architects.

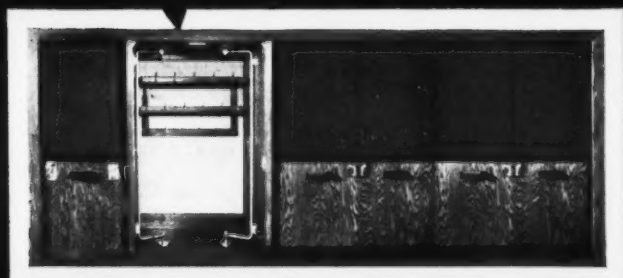


Junior and Grade School, Abington, Pa., Heacock and Hokanson, Architects.

Chatsworth Avenue School, Larchmont, N Y.;
Knappe and Morris, Architects

Anthony J. Bowen School, Washington, D C
A. L. Harris, Architect.

Providence Street Junior High School, Worcester, Mass.; C. Adolph Johnson, Architect.



The judgment of School Specialists favors COMPLETE NATURAL VENTILATION, the latest development for modern schools . . . The fresh air enters through the AUSTRAL Window and is diffused through the classroom, passing under the Wardrobe doors and is vented out through an aperture in the top of the Wardrobe . . . Simplified . . . Economical . . . Efficient.